

## United States Department of the Interior



#### FISH AND WILDLIFE SERVICE

Back Bay National Wildlife Refuge 4005 Sandpiper Road Virginia Beach, VA 23456-0286 (757) 721-2412

#### NESTING LOGGERHEAD SEA TURTLE ACTIVITY REPORT 2000 AND 1980-2000 NESTING SUMMARY

Prepared by Refuge Biologists Sara Williams & John Gallegos

Prepared for Department of the Army U.S. Army Corps of Engineers Norfolk, VA

### TABLE OF CONTENTS

I	ABSTRACT3
II	INTRODUCTION4
III	MATERIALS AND METHODS5
IV	RESULTS AND DISCUSSION
	A. Area coverage8
	B. Nesting activities and Capture Results9
	C. Hatch results11
	D. Stranding results13
v	1980-2000 NESTING SUMMARY
	A. Background15
	B. Yearly Nesting Trends15
	C. Nesting Population Estimate16
	D. Nesting Chronology17
	E. Nests Distributions19
	F. Nest Success20
VI	CONCLUSIONS24
VII	LITERATURE CITED26
APPE	ENDIX 1 - Sea Turtle Stranding Reports27
APPE	NDIX 2- Sea Turtle Nest Relocation Data Sheets28
APPE	NDIX 3 - VMSM Stranding Team 1999-2000 Hatchling Report29
APPE	NDIX 4 - NMFS Gillnet Fisheries Closure Announcement30
APPE	NDIX 5 - 1970-2000 Loggerhead Nest Information
APPE	NDIX 6 - 2000 Sea Turtle Program Expenses

# NESTING LOGGERHEAD SEA TURTLE ACTIVITY AT BACK BAY NATIONAL WILDLIFE REFUGE - 2000

#### **ABSTRACT**

This paper presents results from the 8th Annual Study (using Army Corp of Engineers funds) of nesting by the Atlantic Loggerhead sea turtle (Caretta caretta) along the Atlantic Ocean coastline in Virginia Beach, Virginia during 2000. All surveys were implemented by volunteers and staff of the Back Bay National Wildlife Refuge, Virginia Beach, Virginia, throughout the sea turtle nesting season. Two seasonal, full-time biological technicians were hired to search twenty-five miles of beach along the northern periphery of the nesting range of the Atlantic Loggerhead. Refuge biologists investigated two Loggerhead sea turtle crawls during the 2000 nesting season. The successful nesting attempt for the 2000 nesting season occurred July 11, 2000 on Back Bay NWR, 2.6 miles south of the Refuge beach ramp. It produced a nest of 112 eggs. Refuge employees captured the nesting Loggerhead female and Virginia Institute of Marine Science personnel applied flipper tags and a satellite transmitter. A second crawl, located at the southern end of False Cape State Park, provided no evidence of a nest. An employee at False Cape State Park sighted a third sea turtle crawl, however, tides obliterated it before the sighting could be confirmed. No nests or crawls were located along the oceanfronts of Sandbridge, the Virginia Beach Resort Area, or Fort Story. Night patrols were conducted from June 5-June 29 and July 26-August 4 by volunteers and Refuge employees, however no turtle was sighted or captured during this period. This report also includes an analysis of Loggerhead sea turtle nests and stranding data from 1980 to 2000.

Six attached appendices also include the: 1) Year 2000 Sea Turtle Strandings, 2) Year 2000 Sea Turtle Nest Relocations, 3) Marine Science Museum Hatchling Report for 1999-2000, 4) 05/12/2000 National Marine Fisheries Gillnet Closure Announcement, 5) 1970-2000 Virginia Beach Sea Turtle Nest Summary, 6) 2000 Summary of Costs Associated with this program.

#### II. INTRODUCTION

The Atlantic leatherback, the Atlantic loggerhead, the Atlantic green, and the Kemp's Ridley sea turtle are the four sea turtles regularly seen in Virginia waters (Keinath, Musick, and Byles 1987). All of these are federally listed as either threatened or endangered (50CFR1981). The loggerhead, (*Caretta caretta*) is the only recurrent sea turtle species nesting on beaches of the Atlantic Oceanfront in Virginia Beach. Pollution, exploitation, poor fishing practices, and habitat modifications have aided in the loggerhead decline. Since sea turtles come ashore only to lay eggs (Dodd 1988), nesting provides the most convenient opportunity for monitoring and research.

The twenty-five miles of beach searched for loggerhead sea turtle use this year, occurs along the northern extent of the established nesting range for this species in the United States. Loggerhead activity often occurs during the summer in and around the Chesapeake Bay. The Chesapeake Bay serves as a developmental feeding area for juvenile loggerheads (Lutcavage and Musick 1985; Keinath, Musick and Barnard 1989).

Loggerhead females generally nest on a 2 to 4 year cycle, and lay from one to six nests a season (Ehrhart 1979; Dodd 1988). The renesting interval varies from 12 to 16 days, with an average of 14 days (Frazer 1984; Dodd 1988). Sea turtles generally return to the same area to lay successive clutches of eggs, usually within a 5 km radius of the first nest (Dodd 1988).

For eight successive years, personnel of the Back Bay National Wildlife Refuge (BBNWR) have been patrolling the Virginia Beach Resort oceanfront in search of loggerhead sea turtle nests. This has been made possible by funding provided to the Refuge by the U.S. Army Corps of Engineers (the Corps/ACOE), in conjunction with their study of beach replenishment impacts to nesting sea turtles. During the summer of 1993, the first cooperative agreement was established between the Corps and the Refuge. Through this agreement, the Corps provided funding to the Refuge, to determine the extent of nesting sea turtle use along the Virginia Beach oceanfront. The Refuge then hired and trained seasonal biological technicians to patrol this oceanfront and detect sea turtle crawls and other nesting signs. Because the loggerhead sea turtle is a federally listed Threatened species, the Refuge has researched nesting activities and managed nesting populations since the early 1970's. The U.S. Fish and Wildlife Service employs protective measures and funds research projects that aid in the conservation of this federally threatened species, often in partnership with other federal and state agencies.

During 2000, the Corps provided the Refuge with \$20,700 (\$18,700 Labor for 2 Biological Technicians and \$2,000 for Contingent Night-Patrols Labor) for the nesting sea turtle study. An additional \$1,900 was added in May 1999, for expanding the survey route to include the remaining three miles of Fort Story's western beachfront that had not been patrolled in the past. Thirty-eight percent of the funding was absorbed by the USFWS Denver Finance Center for administrative costs, while the remaining sixty-two percent was dedicated to salaries of the two seasonal biological technicians hired to patrol the oceanfront and additional Refuge staff during night patrols. Additional miscellaneous equipment, materials, all-terrain-vehicle repairs and

maintenance, gas and oil, and additional support staff for turtle patrols were absorbed by the Refuge budget.

#### III. MATERIALS AND METHODS

Seasonal biological technicians and permanent Refuge staff logged approximately 850 hours managing and collecting information on sea turtle nesting for the 2000 sea turtle nesting season. As during past years, Refuge personnel conducted sea turtle crawl and stranding surveys, via all-terrain-vehicles (ATVs) on six segments of oceanfront beach. Those beach routes included (from north to south): (1) Fort Story; (2) the Virginia Beach Resort Strip; (3) Croatan Beach; (4) the Town of Sandbridge; (5) Back Bay National Wildlife Refuge; and (6) False Cape State Park. All routes were patrolled on a daily basis, seven days a week. Figure 1 illustrates areas these patrol routes.

Surveys were conducted by ATV every morning from May 23 through September 9, along beach routes #4-6, above. Patrols along the Fort Story to Rudee Inlet and Croatan Beach route (#1-3 above) were conducted every morning from June 3 through September 9, starting at 0530 hours; in order to search as much beach as possible before the City of Virginia Beach's "Beachscapers" groomed the Resort beaches and wiped out crawl signs. Patrols took place above the high tide line while traveling in one direction, and along the water's edge the other direction. Whether the high or low beach was patrolled first was decided by whether the tide was rising or falling.

In previous years, night patrols were scheduled to capture a nesting loggerhead laying its second clutch of the season for a period of ten days. VIMS recommended conducting night patrols the entire nesting season to ensure capture during the 2000 nesting season. Back Bay NWR conducted night patrols from June 5 through June 30. Night patrols were stopped after funding for vehicle repairs and manpower was exhausted. No crawls, turtle sightings, or captures occurred during this night patrol period. Night patrols resumed after the first nest on July 11, 2000 for ten days (July 26-August 4). No crawls, turtle sightings, or captures occurred during this second night patrol period.

The nesting female was restrained using a box container constructed by Biologist Sara Williams of exterior plywood and fastened together with hinges. This portable "restraining container" stands three feet high and safely and effectively restrains a turtle when fence posts are placed around the outside.

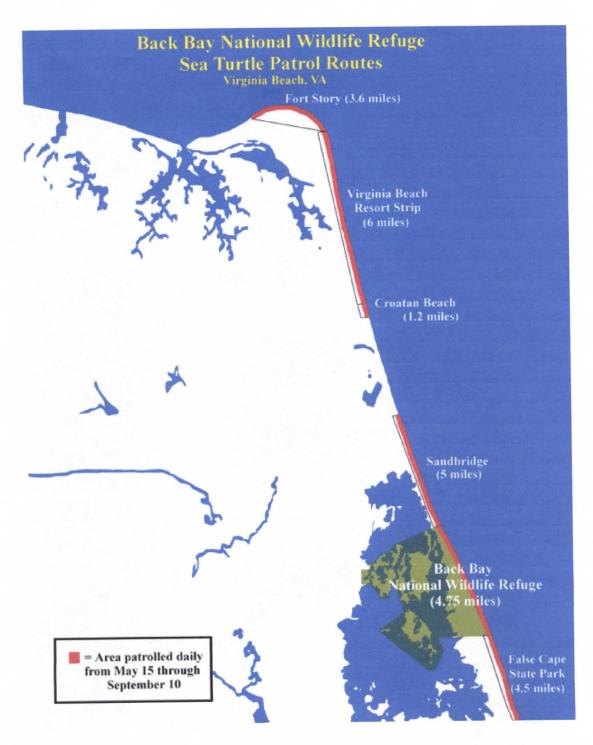


Figure 1. Areas patrolled daily from May 15 through September 10, 2000 for strandings and sea turtle crawls.

All sea turtle crawls were photographed and documented. Metric tape was used to measure crawl widths at three points where tracks were distinct. An average of the three measurements represented the crawl width of the nesting female. Each "body-pit" periphery was marked with wire flags and then carefully searched and excavated for the egg chamber/nest laid by the loggerhead. When eggs were discovered, they were carefully counted and removed. Depth measurements were taken of the top and bottom of the egg chamber. The eggs were then transported in coolers to a protected hatchery site within the sand dunes of Back Bay National Wildlife Refuge. At the hatchery site, all eggs were transferred to a predator-proof cage in the same sequence as the original nest and reburied at the same depth as the original nest. Refuge Employees checked the nest twice daily, starting two weeks prior to the expected hatch date for signs of hatching and to collect ground temperature readings. When a concave depression was detected on the surface of the nest, a refuge staff member was placed on duty from 2100 to 0300 hours to watch for the emergence of hatchlings. Hatchlings were released on the adjacent beach and into the surf within an hour after their emergence.



Photo 1. All nests are reburied in a "Nesting Container" (pictured above) to protect relocated nest and eggs from predators.

In addition to patrolling for turtle nests, Refuge personnel collected data on sea turtle strandings in the surveyed areas. Nearly all stranded animals were dead. Each stranding was measured, examined for trauma and cause of death, and tissue and/or humerus samples collected. Patrollers contacted the Virginia Marine Science Museum (VMSM) Stranding Team for additional data collection and carcass removals on all beaches except for Back Bay NWR and False Cape State Park. Completed "Sea Turtle Stranding and Salvage Network-Stranding Report(s)" were sent to the Virginia Institute of Marine Science (VIMS) where reports were entered into the National Marine Fisheries Service's (NMFS) national stranding database. Copies of those reports are included in this report as Appendix 1. Section D of Part 1V, Results and Discussion, provides a detailed narrative on this topic.

#### IV. RESULTS AND DISCUSSION

#### A. AREA COVERAGE

Over eight hundred hours of sea turtle patrol or other sea turtle duty hours were logged by trained Refuge personnel. Approximately 13 miles of oceanfront beach were covered from Fort Story to Croatan Beach; and 15 miles from the Dam Neck Naval Facility border in Sandbridge, to the North Carolina border. Area coverage along Sandbridge Beach and one or two portions of Fort Story, varied with high tides, since beach narrowness, bulkheads, beach erosion and high winds made portions of the beach inaccessible by ATV on some patrol days. On those occasions, Refuge staff would walk out to such areas from adjacent roads and view the missed area through binoculars.

Patrols of the Sandbridge-Back Bay Refuge-False Cape State Park oceanfront commenced on May 23, 2000. Due to ATV mechanical problems, the Fort Story to Rudee Inlet/ Croatan Beach patrols could not start until June 3, 2000. All patrols ended on September 9, 2000.

The possibility of undetected sea turtle nests exists along the Fort Story-Croatan Beach segment; since beach cleaning is conducted by City beach maintenance crews, every morning between 0230 to 0900 hours. This tractor maintenance smooths out Resort beaches, making crawl detection impossible. Although Refuge beach patrols start at 0530 hours, City workers often have already cleaned and smoothed some portions of the Resort beach. Refuge biological staff maintained contact with these City workers on the beach, and handed out information on sea turtle crawl recognition, nesting, and who to contact should they locate a crawl. Their responses have been positive. An organized informational program through the Waste Department will be pursued prior to the next nesting season.

The first series of night patrols occurred during June 5-30, 2000. No turtle was located; but several trespass vehicles were seen on the beach by non-law enforcement volunteers. The second series of night patrols took place during July 26 - August 4.

Turtles that nest in the Virginia Beach vicinity may also nest in the northern region of North Carolina. A ten mile stretch of beach from Corolla to the NC/VA border is patrolled daily during

the nesting season by Mackay National Wildlife Refuge.

#### B. NESTING ACTIVITIES AND CAPTURE RESULTS

Nesting sea turtle surveys of the Fort Story and Resort beaches yielded no sea turtle nests or crawls. One nest located on Back Bay NWR and one false crawl at False Cape State Park were discovered by Refuge Staff this year. Information regarding the nest and crawl were recorded on "Nest Relocation Data Sheets," (Ref. Appendix 2).

Refuge permittee Ernie Bowden, discovered an emerging Loggerhead sea turtle at 2220 hours on July 11, 2000. He reported the sighting by telephone to Refuge Biologist Lamar Gore at his residence, who arrived at the scene at 2305 hours. Refuge Biologist Sara Williams, Biological Technician Michael Christine Farrell, Refuge SCEP Student Brighid Tewey, and Student Interns Andy Campomizzi and Eric Duran also responded and assisted in excavating Nest #1/Crawl #1. One hundred and fifteen (115) eggs were excavated at 0030 hours and removed from the nest cavity. Eggs were carefully moved to a safer, "nursery" location within the Back Bay National Wildlife Refuge, placed into predator-proof cages, and reburied.

A satellite transmitter was attached to the carapace and metal tags attached to flippers by VIMS employee Kate Mansfield, before releasing it into the ocean. All Refuge night-patrol vehicle headlights were covered with red tape to minimize light disturbance. Photographs were taken of the crawl, the nest-site, the excavation, and captured Loggerhead sea turtle with transmitter. Measurements of the crawl and the nest cavity were also taken. The following table summarizes the chronology of the July 11<sup>th</sup> nest:

Nest #	Date of Nesting	Location	Total # of Eggs Laid	Expected Hatch Date	Actual Hatch Date	Length of Incubation (days)
					Sept. 25-Oct.	
1	July 11, 2000	Back Bay NWR	115	Sept. 9, 2000	5, 2000	76-86

Table 1. 2000 Loggerhead Sea Turtle Nesting Chronology

Crawl number two was reported by False Cape State Park Staff on July 16, 2000 at 0840 hours. The crawl was located 150 meters north of the False Cape State Park/North Carolina beach barricade. Refuge employees and volunteers investigated the crawl at 1015 hours. The high tide obliterated some sections of the crawl, but tracks leading to a turn around point were identified on the upslope of the first foredune. Staff identified the false crawl after excavating the turn-around point which resembled a body pit. North Carolina residents reported a second crawl the morning of July 16 located on the northern beach of North Carolina near the Virginia state border. Ruth Boetcher, the Sea Turtle Project Coordinator for the NC Nongame and Endangered Wildlife Program, investigated the North Carolina crawl, discovered a nest, and placed a predator protection device on top of the nest.



Photo 2. Nest #1 - July 11, 2000 First crawl leading to first nest, marked by pink flags embedded in sand (above).



Photo 4. Nest #1 - (7/11/00) Application of a transmitter on sea turtle, closed in a "turtle-restraining" container, by Kate Mansfield of Virginia Institute Marine Science, Gloucester.



Photo 3. Nest #1 - (7/11/00) Close-up of Excavated Nest Entrance (above)



Photo 5. <u>Crawl #2</u> - July 16, 2000 The second crawl, from shore to foredune, leads to a possible nest.



Photo 6. <u>Crawl #2</u> (7/16/00)- Showing location on False Cape State Park foredune, with Refuge staff searching for nest.

#### C. HATCH RESULTS

Refuge personnel excavated and relocated one loggerhead sea turtle nest during 2000. Nest success is detailed in Table 2. A total of one hundred fifteen loggerhead sea turtle eggs were excavated and 112 eggs re-buried in the Refuge nursery by Refuge staff. One egg was punctured during the nest search. Two eggs had fused shells but separate yolks and were slightly torn at point of fusion. Damaged eggs were not re-buried to protect the nest from bacteria and reduce predator attraction. Soil and air temperatures were taken at the nursery site during the twice daily checks of a nest, 10-14 days prior to the expected hatch date. Hatch success was low due to invasion of the nest by dune grass roots. A total of 56 live loggerhead hatchlings were released into the Atlantic Ocean from the Refuge beach. Refuge staff released the first group of 18 hatchlings from 2200 to 2345 hours on September 24 on an outgoing high tide. Four hatchlings were transferred to the Virginia Marine Science Museum in the care of Thomas Harder for scientific growth rate observations and public education. These turtles will be released into the Atlantic Ocean after one year, as during past years.

Four additional hatchlings emerged from the nest during September 25-27. Refuge Biologist Sara Williams examined the nest during an afternoon nest check on October 4, after noticing exposed grass roots around the nest cage. A matrix of roots infiltrated the entire nest and may have prevented hatchling emergence. Sixteen live hatchlings in poor condition and two dead hatchlings were found in the top four inches of the nest on October 4. The live hatchling were released immediately. Due the unusual circumstances and the possibility of trapped live hatchlings, the nest was re-excavated on October 5. A total of fourteen live hatchlings, 15 dead hatchlings, and 38 unhatched eggs were removed during the excavation. The live hatchlings were immediately released.

The four hatchlings donated to the Virginia Marine Science Museum (VMSM) in 1999 were released into the Gulf Stream by the U.S. Coast Guard on November 8, 2000. Short notice prevented Back Bay staff from accompanying a VMSM volunteer on the Coast Guard Cutter for the release of the one year old juveniles. A summary of hatchling growth and development was prepared by Mark Swingle, VMSM Curator of Stranding Program and Acquisitions and is included in Appendix 3.

Table 3 provides an egg analysis for the 2000 nest. The 2000 hatch rate was 63.5%. The percent of hatchlings that emerged and were released, i.e. nest success, was 45.2%. The 1999 hatch and nest success rates were 97% and 95%, respectively. Dead hatchlings that did not emerge may have been trapped by expanding grass roots, died shortly after hatching, or suffered from developmental problems. Dead eggs were frozen and examined at a later date. Results are in Table 3.

Vandalism of the nursery site in 1999 required a new nursery site in a more remote area for the 2000 nesting season. Footprints of various animals including horse, deer, raccoon and fox were seen around the nursery area. Human foot prints as well as bicycle tracks were also present, however, no apparent disturbance to the nest occurred. The presence of grass roots was not noticed nor predicted during the nest reburial on July 12, 2000 at 0345 hours. There were no problems with red ant infestations this year. A new nursery site will be established for the 2001 nesting season which will be in an open grassless area devoid of ant colonies and human disturbance.

	# Eggs	# Eggs	# Live	# Dead	# Hatchlings	# Unhatched	Nest Success
Nest #	Laid	Hatched	Hatchlings	Hatchlings	Released	Eggs	(%)*
1	115**	73	56	17	52***	38	45.2
Totals	115	73	56	17	52	38	45
Totals	115	73		17		38	

Comments: \*Nest success refers to the number of hatchlings released. \*\*3 damaged eggs were not reburied with nest.

\*\*\*Virginia Marine Science Museum received four live hatchlings on 09/24/00 for growth research and public education.

Temporal distribution of hatching: 09/24=22 hatchlings emerged, 09/25=2 hatchlings emerged, 09/26=1 hatchling emerged, 09/27=1 hatchling emerged, 10/04=16 live hatchlings removed, 10/05=14 hatchlings.

Table 2. 2000 Loggerhead Sea Turtle Nest Success Summary

Nest #	# Eggs Laid	# Eggs Hatched	# Eggs Hatched	# Eggs Infertile	# Eggs Predated	# Eggs Addled*	# Eggs w/ Dead Embryos
1	115	3	73	0	0	15	23
Totals	115	3	73	0	0	15	23
Comme	Comments: Shells of hatched and unhatched eggs orange in color (possibly from vegetation roots). *Rotted eggs with no embryonic development.						

Table 3. 2000 Loggerhead Sea Turtle Egg Analysis Summary

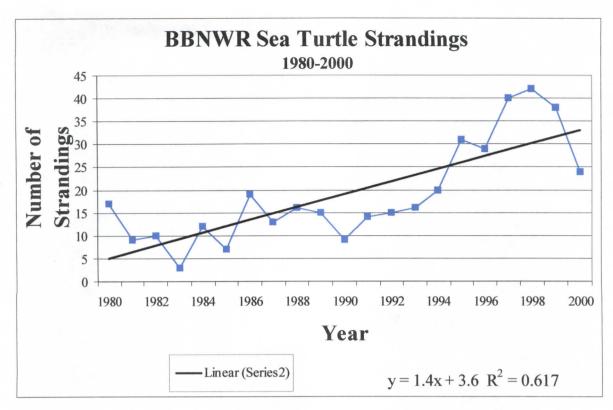


Figure 2. BBNWR Sea Turtle Strandings from 1980-2000.

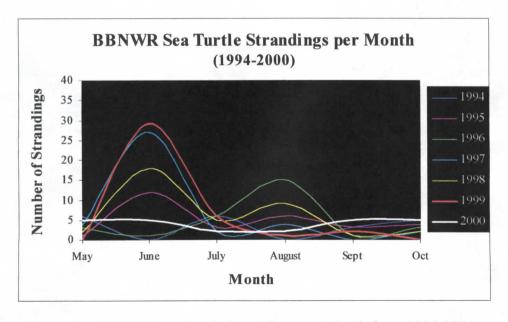


Figure 3. BBNWR Sea Turtle Strandings per Month from 1994-2000.

#### V. 1980-2000 NESTING SUMMARY

#### A. BACKGROUND

Appendix 5 contains a general summary of BBNWR nesting activity from 1970 to 2000 as well as data tables used in the creation of all graphs in this report. The first documented record of nesting was in 1970, although nesting previous to this year is likely. Loggerhead turtles typically nest at two to three year intervals and exhibit nest site fidelity. Three nests occurred from 1970 to 1971, however no nests were reported from 1972 to 1978. It is not known whether the beaches were regularly patrolled from 1972 to 1978; whether the females which usually nest in Virginia Beach experienced mortality; nested farther south in North Carolina; or whether this seven period experienced a natural decline.

The Refuge participated in the "Loggerhead Egg Transplant Project" from 1972 until 1979 in coordination with Chincoteague, Pea Island, and Cape Romain National Wildlife Refuges. The Project's objective was to reestablish the population of nesting Loggerhead sea turtles along Refuge beaches by relocating nests from Cape Romain NWR to Back Bay NWR. A total of 5,577 loggerhead hatchlings from 72 nests were incubated in predator proof cages on Back Bay NWR released into the Atlantic from the Refuge beach. The Southeastern Marine Recovery Team recommended terminating the program until more information regarding the effectiveness of nest transplanting and the influence of transplanting on sex ratios were available. The Recovery Team also recommended conducting daily sea turtle patrols during the nesting season to protect naturally occurring nests in this area.

Daily beach patrols were conducted on BBNWR from June until September of 1980. Daily patrols continues from June or July until August or September on BBNWR and FCSP during 1981 until 1985. From 1986 until the present, daily patrols are conducted on BBNWR, FCSP, and Sandbridge. Nesting activity for the years prior to 1980 were not analyzed due to inconsistent daily beach patrols. Data from 1980-2000 are analyzed with the assumption that all nests were detected and investigated by Refuge staff. A total of 54 nests and 15 false crawls were discovered from 1980-2000.

#### B. YEARLY NESTING TRENDS

Figure 4 demonstrates the annual trends for number of nests from 1980 to 2000. Based on the 21 years of gathered data, 80% of nests occurred during "odd" years; i.e. 1981, 1983, 1985, etc.

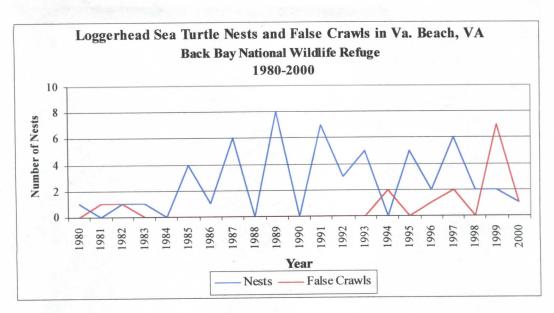


Figure 4. Loggerhead sea turtle nests and false crawls in Virginia Beach, VA from 1980-2000

#### C. NESTING POPULATION SIZE

A total of 54 nests were laid in Virginia Beach over the 21 year summary period (1980-2000). Using this information and the possibilities that nesting females may have laid: one or two nests every two years; one or two nests every three years; or some combination thereof, the nesting population in Virginia Beach may consist 2 to 8 females. This estimate was calculated using the following equation:

Number of nesting females =  $\underline{\text{(Total # of nests)}}$ (P/I)\*Q

Where P=Period; total number of years nests were laid I=length of interval between nesting seasons in years Q=number of nests per individual during a nesting season

This estimate assumes no immigration or emmigration of the population and a 0% mortality of nesting females. The estimates shown in Figure 5 are not statistically reliable and are presented for informational purposes only. Reliable estimates on the nesting population can be calculated only if night patrols are conducted each night of the nesting season and each nesting female is tagged. The total number of nesting loggerhead turtles in the vicinity of Virginia Beach cannot be calculated without additional data.

Females nesting on the northern beaches of North Carolina may also nest in Virginia Beach. Nesting population estimates for the vicinity of Virginia Beach may be larger if nests in northern North Carolina are included in calculations.

Esuma		mber of Nesti Bay National Wil	_		100	
		Data:				
	# Nests per interval	Length of Nesting interval in yrs	Period (# of yrs)	Total # of Nests		
	1	2	21	54		
	1 1	3	21	54		
	2 2	2 3	21 21	54 54		
Nesting frequency	Calculations: N	umber of Individuals	for each nes	ting regime	50%	
once every 2 yrs	0.51	1.03	1.54	2.06	2.57	
once every 3 yrs	0.77	1.54	2.31	3.09	3.86	
twice every 2 yrs	0.26	0.51	0.77	1.03	1.29	
twice every 3 yrs	0.39	0.77	1.16	1.54	1.93	
Nesting frequency	60%	70%	80%	90%	100%	
once every 2 yrs	3.09	3.60	4.11	4.63	5.14	
once every 3 yrs	4.63	5.40	6.17	6.94	7.71	
twice every 2 yrs	1.54	1.80	2.06	2.31	2.57	
twice every 3 yrs	2.31	2.70	3.09	3.47	3.86	

Table 4. Estimation of Number of Nesting Females 1980-2000.

#### D. NESTING CHRONOLOGY

Figure 5 details the number of turtle nests from 1980-2000. Fifty-seven percent of all nests occurred in July; while 26% occurred in June, 15% in August, and less than 2% in May.

Loggerhead turtles move north along the East Coast in the spring as ocean water temperatures increase (Coles and Musick 2000; Eperly et al 1995). Timing of nesting activity may correlate with ocean water temperatures; as ocean temperatures rise earlier in the nesting season, nests may be laid earlier. The National Oceanic and Atmospheric Administration (NOAA) produced a Coastal Water Temperature Guide (Table 3) and computed averages from records ranging from several years to several decades. Ocean temperatures for Cape Charles, Virginia, located on the Cheasapeake Bay, fluctuate more drastically than Jacksonville, Florida, an area with the highest density of nesting loggerhead turtles in the U.S.

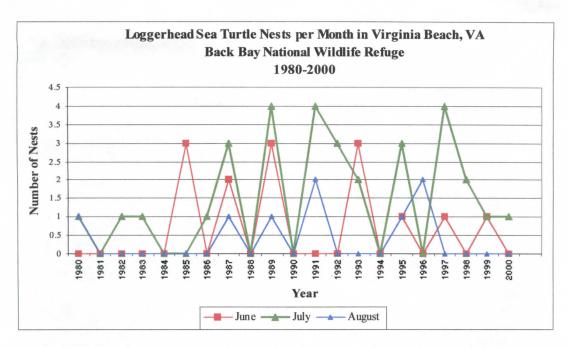


Figure 5. 1980-2000 Loggerhead Sea Turtle Nesting Chronology.

		TEMPERATURE GUIDE						
Month	Cape Charles, VA	Jacksonville FL						
January	36	57						
February	39	56						
March	46	61						
April *	51	68						
April **	56	71						
May *	60	74						
May**	66	77						
June *	70	80						
June **	69	81						
July *	76	83						
July **	77	84						
Aug *	78	83						
Aug**	77	83						
Sept*	76	83						
Sept**	74	82						
Oct*	66	78						
Oct**	61	72						
Nov	54	67						
Dec	44	60						

Table 5. National Oceanographic Data Center Coastal Water Temperature Guide for Cape Charles, Va and Jacksonville, FL

#### E. NEST DISTRIBUTIONS

Forty-four percent of the nests from 1980-2000 occurred on the beaches of Back Bay National Wildlife Refuge; 24% on False Cape State Park; 8% on Resort and Croatan beaches, and 9% on Sandbridge beaches which also include Dam Neck and Little Island City Park (Figure 6). Nests in the "N/A" category include records of eight nests with unrecorded locations during 1989, and one nest laid in 1992 at Dam Neck Naval Base. Figure 7 shows a map of the Virginia Beach area from Fort Story to the North to the North Carolina border to the South. Sixty-nine percent of the nests in Virginia Beach occurred on Back Bay NWR and False Cape State Park. These two beaches total approximately 12 miles in length, the longest contiguous tract of undeveloped shoreline in southeastern Virginia. More sea turtles may nest on Back Bay NWR because nests in other areas of Virginia Beach are relocated to Back Bay and all hatchlings released on Back Bay NWR beaches. Back Bay NWR and False Cape State Park may also be the extreme northern-most range of loggerhead nesting as well as the most suitable nesting site.

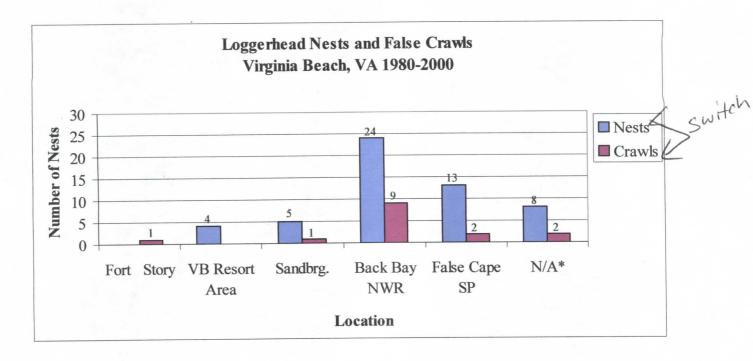


Figure 6. 1980-2000 Loggerhead Turtle Nests and False Crawls in Virginia Beach, VA.

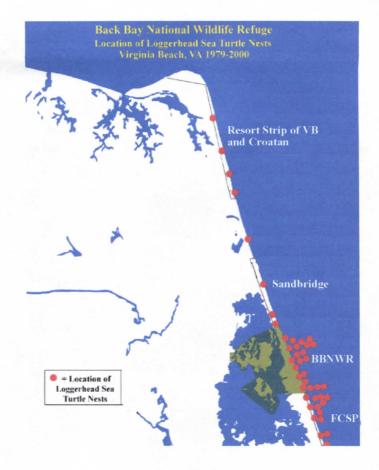


Figure 7. Map of Virginia Beach showing Loggerhead Sea Turtle Nest Locations from 1979-2000.

#### F. NEST SUCCESS

Nest success rates were determined by dividing the number of eggs in a nest by the number of hatchlings that emerged. Thirty-seven out of fifty-four nests (69%) during the 1980-2000 period had nest success rates of 81% or higher (Figure 8). Figure 9 demonstrates nest success rates from 1980-2000 for all 54 nests. Nest success rates ranged from 0% to 98%, and averaged 79%.

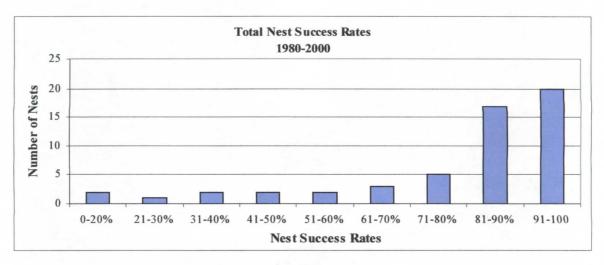


Figure 8. 1980-2000 BBNWR Total Nest Success Rates.

Nest success is dependent upon many factors. Available data on BBNWR nests also include length of incubation, top nest depth, and bottom nest depth. Nest success was compared with these data to help identify significant trends or correlations (Ref. Appendix 5).

Incubation period data are not available for nests prior to 1980, nor for nests laid June 5, 1989 and July 30, 1992. Nest success and length of incubation from 1980-2000 are illustrated in Figure 10. The average incubation period for nests is 71 days but ranged anywhere from 59 days (nest success=94.8%) to 112 days (nest success=94%). Nest incubation lengths with a success rate of 80% or higher (68% of nests) averaged 69 days; nests with nest success rates below 80%, (32% of nests) averaged 75 days. The "trend line" in Figure 10 (Microsoft Excel linear regression) does not demonstrate a significant relationship between the nest success rate with length of incubation in days.

Figures 11 and 12 respectively, compare 1991-2000 nest success rates with top and bottom nest depths. Top and bottom nest depth measurements are only available from 1991-2000. Only the depths of the original nest were recorded prior to 1997, though it can be assumed all relocated nests were buried as close as possible to the depths and width of the original nest. Top and bottom nest depths refer respectively to the distance in centimeters from the surface of the sand to the top of the nest and the bottom of the nest. Linear regressions created using Microsoft Excel for both figures do not demonstrate a significant relationship between top and bottom nest depths and nest success rates. It can be concluded that other factors such as nest fertility, weather, and physical site parameters play a more significant role on nest success.

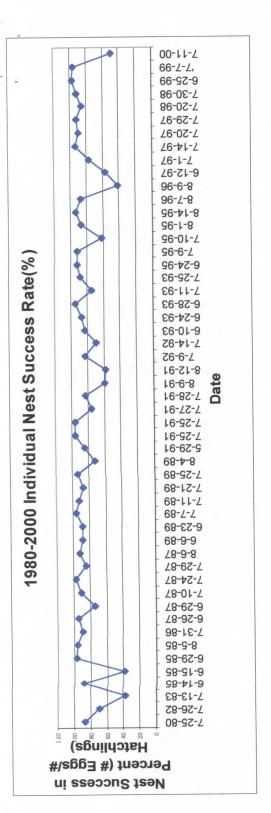


Figure 9. 1980-2000 BBNWR Individual Nest Success Rates (above).

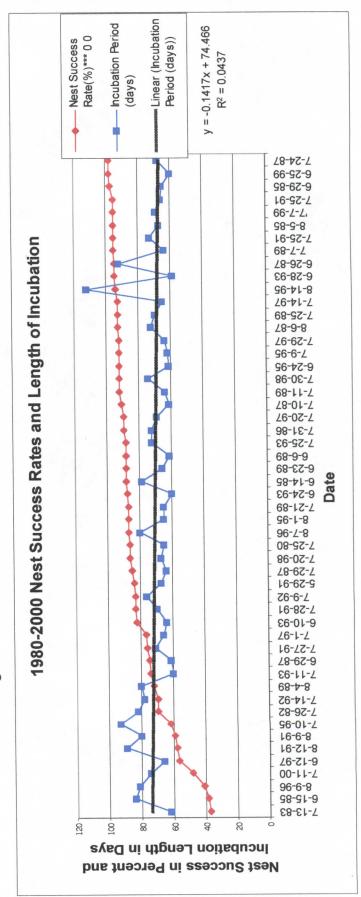


Figure 10. 1980-2000 Individual Nest Success Rates and Length of Incubation (above)

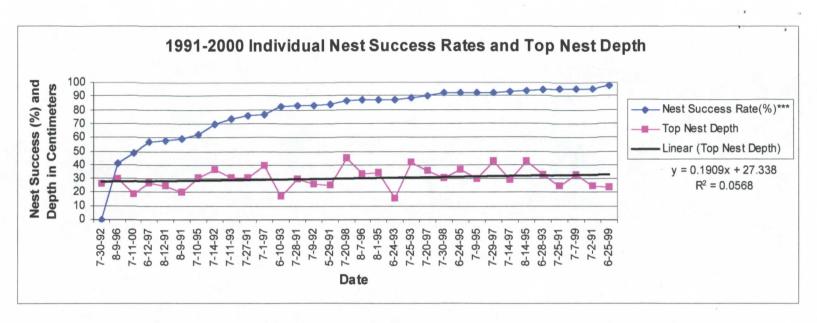


Figure 11. 1191-2000 Individual Nest Success Rates and Top Nest Depth

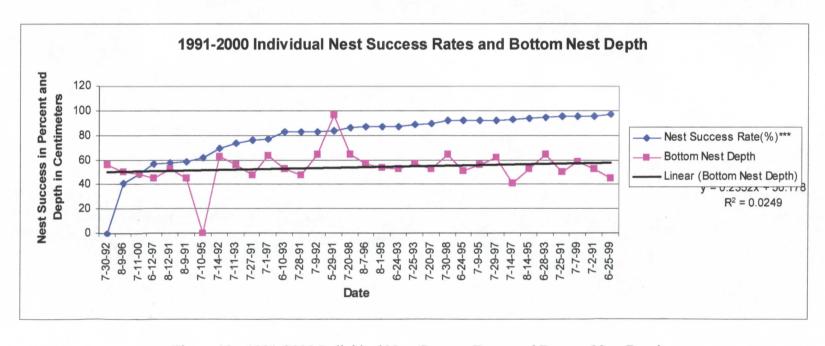


Figure 12. 1991-2000 Individual Nest Success Rates and Bottom Nest Depth

#### IV. CONCLUSIONS

Virginia Beach, Virginia provides crucial nesting habitat along the northern edge of the loggerhead sea turtle nesting range. Open beaches represent the only habitat available to nesting females in this area. Annual historical data presented in this report provide insights into this nesting sea turtle population. Loggerhead sea turtles have historically nested along the Virginia Beach shoreline, although most nests are concentrated along the twelve miles of Back Bay National Wildlife Refuge and False Cape State Park beaches. These beaches are undeveloped and have never been renourished. Nests have also occurred on beaches from Fort Story south to Sandbridge. All beaches should continue to be monitored and nests protected for the Virginia nesting population of loggerhead sea turtles to be effectively maintained, and as long as potential onshore and offshore impacts to threatened nesting Loggerhead populations continue.

During the year 2000 monitoring program, one Loggerhead sea turtle nest was discovered along the Back Bay NWR ocean-front. It was relocated to a remote nursery on Back Bay NWR. This nest yielded 56 Loggerhead hatchlings that were released shortly after emergence from the nest. The nesting female was captured, tagged, and tracked via satellite transmitter by VIMS.

Four, one-year-old Loggerheads from a Refuge nest in 1999, were also released into the Gulf Stream by US Coast Guard and Virginia Marine Science Museum staff, on November 8, 2000. Such introductions may boost the local breeding population. In addition, 37 stranded sea turtles were discovered during daily patrols. These data and collected tissue samples, should provide new and valuable information on sea turtle demographics, genetics, and population structure along the Eastern Seaboard.

Data from 1980 to 2000 reveal several interesting trends in the nesting patterns of loggerhead sea turtles in Virginia. Over a 21 year period, 54 nests occurred in Virginia Beach, 69% of which occurred on the beaches of Back Bay National Wildlife Refuge and False Cape State Park. The number of turtles nesting in Virginia Beach could vary anywhere from 2 to 8; individuals assuming there is no immigration or emmigration into or out of the population, that nesting females experience a 0% mortality, and that each nesting female nests 1-3 times every 2-3 years. The majority of turtles seem to nest on odd-numbered years (ie. 1981, 1983, etc.). The average success rate for relocated nests is 79%.

Satellite telemetry and tagging are good techniques for detecting changes in inter-nesting and post-nesting behavior. Due to the likelihood of flipper tags loss, PIT (Passive Integrated Transponder) tags are recommended. Data from nesting beaches only indicates a presence or absence of nesting, and not enough information to discriminate between mortality and/or behavioral changes of individuals.

The Historical Summary within this report (Ref. Appendices and text) should provide information useful in determining potential effects of beach replenishment projects on sea turtle nesting in this area.

Back Bay National Wildlife Refuge has been responsible for capturing nesting loggerhead turtles at night for the past eight years. We have made every effort possible to accomplish this task; but have found this responsibility puts a serious strain on Refuge volunteers, staff and equipment resources to an unacceptable level. Refuge four-wheel drive vehicles experience heavy wear-and-tear when regularly driven on patrolled beaches. Night patrols have resulted in inoperable vehicles for Refuge uses outside the sea turtle program. We do not currently have a vehicle

capable of withstanding further night patrol duties. The money to purchase a new vehicle is not available, nor is the staff time required to conduct night patrols. Appendix 4 lists a detailed summary of expenses incurred by the Corps and BBNWR for the 2000 season, including night patrols. Night patrols could not have been conducted without the help of volunteers who alleviated the stress to Refuge staff of working odd, long hours, and reduced Refuge costs. The Refuge therefore requests relinquishment of all future responsibilities for managing night patrols; and requests transfer of future funds and responsibilities to the Virginia Institute of Marine Science.

#### V. LITERATURE CITED

- Barnard, D. E., J.A. Keinath, and J.A. Musick. 1989. Distribution of Ridley, Green and Leatherback Turtles in Chesapeake Bay and Adjacent Waters. In: Eckert, Eckert, and Richardson (compilers), Proceeding Ninth Annual Workshop on Sea Turtles
   Conservation and Biology. NOAA Tech. Mem. NMFS-SEFC-232. Miami, FL. 201-203.
- Dodd, K.C. 1988. Synopsis of the Biological Data on the Loggerhead Sea Turtle *Caretta caretta*, *Linnaeus* 1758.
- Coles, W.C. and J. A. Musick. 2000. Satellite sea surface temperature analysis and correlation with sea turtle distribution off North Carolina. Copeia 2: 551-554.
- Ehrhart, L.M. 1979. Analysis of Reproductive Characteristics of Caretta caretta in East-central Florida. American Zoology 19:955.
- Epperly, S. P., J. Braun, A. J. Chester, and F.A. Cross. 1995. Winter distribution of sea turtles in the vicinity of Cape Hatteras and their interactions with the summer flounder trawl fishery. Bulletin of Marine Science 54(2): 547-568.
- Frazer, N.B. 1984. A Model for Assessing Mean Age-specific Fecundity in Sea Turtle Populations. Herpetologica 40:281-291.
- Keinath, J.A., J.A. Musick, and R.A. Byles. 1987. Aspects of the Biology of Virginia's Sea Turtles: 1979-1986. Virginia Journal of Science 38(4):329-336.
- Lutcavage, M. and J.A. Musick. 1985. Aspects of the Biology of the Sea Turtles of Virginia. Copeia pp. 449-456.
- Musick, J.A. 1988. The Sea Turtles of Virginia. Virginia Institute of Marine Science, College of William and Mary.
- National Archives of the United States, Office of the Federal Register. Code of Federal Regulations: Wildlife and Fisheries. 1981. 50 CFR: parts 1 to 199.
- National Oceanographic Data Center Coastal Water Temperature Guide. U.S. Department of Commerce, National Oceanic and Atmospheric Administration. Website: www.nodc.noaa.gov/dsdt/wtg12.html.

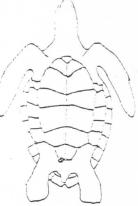
## •

# APPENDIX 1

SEA TURTLE STRANDING REPORTS

#### SEA TURTLE STRANDING AND SALVAGE NETWORK - STRANDING REPORT CESERVER'S NAME / ADDRESS / PHONE: STRANDING DATE: M.I. 1 Last Williams Year 2006 Month 100 Day 25 On Back Bay National Wildlife Refuge (BBNW) Turtle number by day 6 3 S 4005 Sandpiper Rd., VA Beach, VA Field #: State coordinator must be notified within 48 hrs: Area code/Phone number (757) 721-2412 this was done by \_\_phone (757)437-6159 \_\_fax (757)437-4933 SPECIES: (check one) STRANDING LOCATION: CC = Loggerhead Virginia State Virginia County CM = Green Descriptive location (be specific)\_ DC = Leatherback 3/4 mile South of Ei = Hawksbiil border of \_\_ LK = Kemp's ridley Fake Cape State Har s UN = Unidentified Latitude Check Unidentified if not Longitude cositive. Do Not Guess. CONDITION: (check one) FINAL DISPOSITION: (check one) 1 = Left on beach where found, painted? Tyes\* No(5) Protos taken? Yes X No = Fresh dead 2 = Buried: on beach / off beach. Species ventiled by state 2 = Moderately decomposed carcass painted before buried? \_\_\_Yes\* \_\_\_No X3 = Salvaged: \_\_\_all / X part(s), what/why? Ieff Frunt Flipper coordinator? Yes Tanc 3 = Severely decomposed 4 = Oried parcass SEX: (check one) 5 = Skeleton, bones only out of surf, 1/2 to dunes mmature, undetermined ∠4 = Pulled up on beach/dune; painted? ∠Yes\* \_No Female \_\_ Male 6 = Alive, released TAGS: Contact state coordinator before -cw was sex determined? 7 = Alive, taken to rehap, facility, where? \_\_\_\_ disposing of any tagged animal!! Filipper tags present? Tyes No Check all 4 flippers. If found, record tag ail length (adult only) 8 = Left floating, not recovered; painted? Yes\* No 9 = Disposition unknown, explain a of tail beyond number(s) / tag location / return address \_\_\_\_ cm / in \*If painted, what color? \_O(ct) GQ CARAPACE MEASUREMENTS: (see drawing) Fish PIT tag scan? Tyes No Using calipers Lies hound, record number / tag location Circle unit Straight length (NOTCH-TIP) Minimum length (NOTCH-NOTCH) Coded wire tag scan? 🗌 Yes 💟 No Straight width (Widest.Point) cm / in if positive response, record location (flipper) Using non-metal measuring tape Circle unit Curved length (NOTCH-TIP) Checked for living tag? Yes No. Minimum length (NOTCH-NOTCH) if found, record location (scute number & side) Curved width (Widest Point) Circle unit Weight actual/ sst. rg.nai TIP Mark wounds / abnormalities on diagrams at left and describe below (note tar or oil, gear or debris entanglement, propeller damage, epiblota, papillomas, emaciation, etc.). Please note if no wounds / abnormalities are found. algae and bamades With

Measuremen



CESERVERIE WANTE	TRANDING AND SALVAGE	NETWORK - STRANDING REPORT
ACACIVATES S NAME / V	DEDESS / DUONE	:
rirst <u>Jara</u>	_M.IT_Last_Williams	STRANDING DATE:
On Back Bay Va	_ mil Ldst	Year 2010 Month I OlDay 25
4005 C	tional Wildlife Refuge (183	Turtle number by day OR
7. JSS 4003 Sandpi	per Rd., VA Beach, VA 23456	- I raide idince: by Jav Oley
		Field #:
Area code/Phone number	/757\ 701 0//-	State coordinator must be notified within 48 hrs:
	(757) $721-2412$	this was done byphone (757)437-6159
		email [fax (757)437-4933
SPECIES: (check one)	CTDANA	
CO = Loggerhead	STRANDING LOCATION:	
CM = Green	State Visginia	
		County Virginia Beach
CC = Leatherback	Descriptive location (be specific)	
₩ Ei = Hawksbill	- 1/4 miles	N of BRNUR Beach rango
∠ LK = Kemp's naley	on Ba	CK Ball Companie
UN = Unidentified	Latitude	en oug pour
Check Unidentified if not		Longitude
positive. Do Not Guess.		
Foration Do Not Guess.	CONDITION: (chack and) A Con	
	CONDITION: (check one) A See	
Photos taken? ☐Yes XNo	= 0 = Alive note	1
upacies vertied by state	- Tiesh dead / /.	1 2 = Burney: Thin he par
coordinator) Tyes X,10	= _ moderatery_ecomposed _	Carcaco natros com para la comita de la comita del comita de la comita del la comita del la comita del la comita de la comita del la comita de la comita del la comit
	== 0 = Geverely decomposed	3 = Salvane : 7 = 10
SEX: (check one)	<u> </u>	Quality of Marian Control of the Con
<u> </u>	= 5 = Skeleton, bones only	Just Chira
mmature, undetermined Female Male		2 = Buned:
remale Male	T100	4 = Pailed up on beach dune it aimed Trest Tho
TUW Was sex determinant	TAGS: Contact state coordinator before	
Necroosy	uispositid of any tadded animalli	re 7 = Alive, taken to renabl. facility where?
	Filipper tags present? Yes No	
ail length (acult only)	Check all 4 flippers. If found, record tag	8 = Left floating, not recovered, painted?Yes'No
th of tail beyond	Sumber(s) / tag location / (suite, record tag	9 = Disposition unknown, explain
carabade cm / n	number(s) / tag location / return address	SAUGHI.
	real	"If painted, what color?
- tone exp	Cocco	parties, milet color:
Nuchai ICC NOTCH		CARADACEMENCURE
- / AT	PIT tag scan? ☐ Yes ⊠No	CARAPACE MEASUREMENTS: (see drawing)
Mis	(Afound, record number / tag location	osing campers
		Straight length (NOTOH-TIP)
		Minimum length MOTOH-NOTOHam in
02/2017	Coded wire too conno	Straight width Oddidon 3.
PY 20	Coded wire tag scan? Yes X No	Straight width (Widest Point)
auto a dimensional	f positive response, record location (flipper)	Using non-metal measuring tape Circle unit
		Curved length NCTCH-TP 37.57 (cm s
	Checked for living tag? ☐Yes ※ No	Minimum length (NOTCH-NOTO - Region of the Note of the
	flound, record location (soute number & side)	Curried width and death a
	addon (dodge flambe) a side)	Curved wight (Wides: Foint) - APT om in Best weith Estimate - Sirgle unit
Marginial TIP Posterior		EGENECTH ESTING to Sircie unit
MOTCH NOTCH		Weight   $\equiv$ actual   $\equiv$ ect   $\approx$ 9 C $\approx$ $\approx$ $\approx$ $\approx$
<b>≈</b>		19 0
· // /	Mark wounds apportmatition and	
- 19-	achies on diagram	ms at left and describe below indie (ar or on gear
55/71	or deuris entanglement, propeller damag	ge, epibiota, papillomas, emaciation, etc.) - Please  Afound
	note if no wounds / abnormalities are	Second Please
	Tild in a similar transfer are	: Toung.
	Fresh or head and to	linner and - 1
		ippers appears to have
	Modern te deconiposition	affresh dead Shell is
* * 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		7
	- WOCKECK: tront noht	fupper is nissing. All process
4777	are Missing (could be	Scibly have hos savenaxi
	land distributed to	Subly have bren savenaged
	sing toona above high	TWO line in beach)
	J.	

OBSERVER'S NAME!	ADDRESS AND SALVA	GE NETWORK - STRANDING REPOR
tion <u>Back Bay N</u> . uss 4005 Sandp	M.L  LastWilliamS ational Wildlife Refuge (RRM iper Rd., VA Beach, VA 23456	Year 2000 Month Dodayas Turtle number by day Color
Area code/Phone number		State coordinator must be
SPECIES: (check one)  SPECIES: (check one)  CC = Loggerhead  CM = Green.  DC = Leatherback  EI = Hawksbill  LK = Kemp's ridley  UN = Unidentified  Check Unidentified if not positive. Do Not Guess.  Photos taken? Tyes Tylo  Scecies venified by state.  scordinator? Yes Tylo  SEX: (check one)  Immature. Indetermined  Female Wale  How was sex determined?  Necropsy  Tail ength (adult only)  th of tail beyond  carabace Smiles  Nuchal Notoh	STRANDING LOCATION:  State UVA  Lescriptive location (be specific)  3/4 ALL  Condition  Latitude  CONDITION: (check one)  1 = Fresh dead  2 = Moderately decomposed  3 = Severely decomposed  4 = Dried carcass  5 = Skeleton, bones only  TAGS: Contact state coordinator berodisposing of any tagged animal!!  Flipper tags present? Yes No  Check all 4 flippers, if found, resord tag number(s) / tag location / return address	Field #:  State coordinator must be notified within 48 hrs: this was done byphone (757)437-6159emailfax (757)437-4933  County
	Coded wire tag scan? Yes No If positive response, record location (flipper)	Straight length (NOTCH-TIP)  Minimum length (NOTCH-NOTCH)  Straight width (Widest Point)  Using non-metal measuring to
terior Posterior NOTCH	Checked for living tag? Tyes Who If found, record location (soute number & side)	Minimum length (NOTCH-TIP)  Minimum length (NOTCH-NOTCH)  Curved width (Widest Point)  Weightactual /ast
	approximation are	ns at left and describe below (note tax as all

GESERVER'S NAME / A	ADDRESS / BHONE	E NETWORK – STRANDING REPORT
rirsi <u>Jara</u>	MIT 1-1 & Cillia acc	STRANDING DATE:
On Back Bay No	ational Wildlife Refuge	Your 2015 Of the Fire
ss 4005 Sandrá	retonal Wildlife Refuge	Year 2000 Month 1 C Day 2 4
	per Rd., VA Beach, VA 23456	Further number by day O   1
Area code/Phone number	(757) $721-2412$	State coordinator must be notified within 48 hrs:
SPECIES: (check one)		email
CO = Loggernesd	STRANDING LOCATION:	
CM = Green	State	
DC = Leatherback	Descriptive leading (I	County Viginia Beach
= Hawkscill	Descriptive location (be specific)	1/2 hule south of which words
	on Fase Cay	ne State Fack
UN = Unidentifier		
Check Unidentified if not	Lantuce	10000
cositive. Do Not Guess.		Longitude
	CONCITION	
20000000000000000000000000000000000000	CONDITION: (check one)	FINAL DISPOSITION: (check one)
Enotos (aken)/esNo		1 = 1 et an negan ways a
Signature ventiled by state	= 1 = Fresh gead	
sositamatotis Tiliyas Tiliya	= 'Inderately decomposed	carcass painted before punes 7 = 37
277	3 = Severely decomposed = f = Oried parcase	= Sarvades:
SEX: Idneck one.	5 = Skeleton, pones only	Salvages: _ an _ parties what why  GIVEN TO LIVE OF STRONGLIST
= _mmercre_ruberer= ned	oversion. Jones only	Teac L
remale Wale	T100	4 = = =
TOW Was sex determined?	TAGS: Contact state coordinator before	= = dilve. released = 2 = 2 = 1 ic
Necropsy	2/2003//// ()/ 2/// /2/2/2/	re = 1 7 = Alive, taken to renab. facility   where "
Tail ength (adult only	1 1995 Laus Dresenty - Vac T7 N-	
in of tail beyond	orican an 4 Moneys it found so seed !	8 = Left floating, not recovered: painted? Yes* No
Darabaca	number(s) / tag location / return address	9 = Disposition unknown, exprainYes*No
	COC	
06 (200 - 40 )	2600	'If painted, what color?
Wuchar /		CARARAGE
	PiTitad scand Type Value	CARAPACE MEASUREMENTS: (see drawing)
5 AUSS	193 30011 — 193 X. NO	
	o:Titag scan? Yes 反 No If found, record number / tag location	ouring campers
	if found, record number / tag location	Straight length INCTOBLE P
	n ound, record number / tag location	Straight length (NCTOH-TP) Circle unit
	Coded wire tag scan? The TANK	Straight length (NCTOH-TP) Circle unit
	Coded wire tag scan? The TANK	Straight length (NCTDH-TP) Circle unit  Minimum length (NCTDH-NCTDH cm cm in  Straight width (Widest Point) cm in  Using non-metal massively
	Coded wire tag scan? Tyes No foositive response, record location (flipper)	Straight length (NCTCH-TP)  Minimum length (NCTCH-MCTCH)  Straight width (Widest Point)  Using non-metal measuring tapp
	Coded wire tag scan? Yes No foositive response, record location (flipper)	Straight length (NCTDH-TP)  Minimum length (NCTDH-NCTDH)  Straight width (Widest Point)  Using non-metal measuring tape  Circle unit  Curved length (NCTDH-TP)
	Coded wire tag scan? Yes No foositive response, record location (flipper)	Straight length (NCTCH-N
	Coded wire tag scan? Tyes No foositive response, record location (flipper)	Straight length (NCTDH-TP)  Minimum length (NCTDH-NCTDH)  Straight width (Widest Point)  Using non-metal measuring tape  Circle unit  Curved length (NCTDH-TP)
er ur and a poster or	Coded wire tag scan? Yes No foositive response, record location (flipper)	Straight length (NCTCH-TP)  Minimum length (NCTCH-NCTCH)  Straight width (Widest Point)  Using non-metal measuring tape  Curved length (NCTCH-NCTCH)  Minimum length (NCTCH-NCTCH)  Curved width (Widest Point)
er or a Poster or NOTOH	Coded wire tag scan? Yes No foositive response, record location (flipper)	Straight length (NCTCH-TP)  Minimum length (NCTCH-NCTCH)  Straight width (Widest Point)  Using non-metal measuring tape  Curved length (NCTCH-NCTCH)  Minimum length (NCTCH-NCTCH)  Curved width (Widest Point)  Curved width (Widest Point)  Circle unit  Circle unit  Circle unit  Circle unit  Circle unit
ar or a poster or NOTOH	Coded wire tag scan? Tyes No foositive response, record location (flipper)  Citecked for living tag? Tyes No found, record location (scute number & side)	Straight length (NCTCH-TP)  Minimum length (NCTCH-NCTCH)  Straight width (Widest Point)  Using non-metal measuring tape  Curved length (NCTCH-NCTCH)  Minimum length (NCTCH-NCTCH)  Curved width (Widest Point)  Curved width (Widest Point)  Weightactualest
ar or Tip Posterior NOTOH	Coded wire tag scan? Tyes No focation (flipper)  Checked for living tag? Tyes No found, record location (scute number & side)  Marx wounds apportmetities on globard	Straight length (NCTCH-NCTCH)  Minimum length (NCTCH-NCTCH)  Straight width (Widest Point)  Using non-metal measuring tape  Circle unit  Curved length (NCTCH-NCTCH)  Minimum length (NCTCH-NCTCH)  Curved width (Widest Point)  Curved width (Widest Point)  Circle unit  Circle unit  Circle unit  Circle unit  Circle unit
ar or Tip Postar or NoTO+	Coded wire tag scan? Tyes No focation (flipper)  Checked for living tag? Tyes No found, record location (scute number & side)  Wark wounds achormalities on diagram or depris entanciement, proceilor demos	Straight length (NCTCH-TP)  Straight width (NCTCH-NCTCH- Com in c
er or Tip Poster or NoTo 4	Coded wire tag scan? Tyes No focation (flipper)  Checked for living tag? Tyes No found, record location (scute number & side)  Wark wounds achormalities on diagram or depris entanciement, proceilor demos	Straight length (NCTCH-N
ar or poster or NOTOH	Coded wire tag scan? Yes No foositive response, record location (flipper)  Citecked for living tag? Yes No found, record location (scute number & side)  Mark wounds—achormalities on diagram or depris entanglement, proceller damagnote if no wounds / abnormalities are	Straight length (NCTCH-TP)  Minimum length (NCTCH-NCTCH)  Straight width (Widest Point)  Using non-metal measuring tape  Curved length (NCTCH-NCTCH)  (Minimum length (NCTCH-NCTCH)  (Minimum length (NCTCH-NCTCH)  (Curved width (Widest Point)  (Curved width (Widest Point)  (Circle unit)
ar or poster or NOTO	Coded wire tag scan? Yes No foositive response, record location (flipper)  Citecked for living tag? Yes No found, record location (scute number & side)  Mark wounds—achormalities on diagram or depris entanglement, proceller damagnote if no wounds / abnormalities are	Straight length (NCTCH-N
er or tip Poster or NOTO 1	Coded wire tag scan? Tyes No focation (flipper)  Checked for lying tag? Tyes No found, record location (scute number & side)  Wark wounds achormalities on diagram or depris entanglement, proceiler damagnote if no wounds / abnormalities are	Straight length (NCTCH-N
ar or Tip Poster or NOTO T	Coded wire tag scan? Yes No foositive response, record location (flipper)  Citecked for living tag? Yes No found, record location (scute number & side)  Mark wounds—achormalities on diagram or depris entanglement, proceller damagnote if no wounds / abnormalities are	Straight length (NCTCH-N
ar or Tip Poster or NoTO+	Coded wire tag scan? Tyes No if positive response, record location (flipper)  Citecked for living tag? Tyes No flound, record location (scute number 4 side)  Marx wounds—achormalities on diagram or depris entanglement, proceiler damagnote if no wounds / abnormalities are  Not in Cestions	Straight length (NCTCH-N
ar or Tip Postar or No To A	Coded wire tag scan? Tyes No if positive response, record location (flipper)  Citecked for living tag? Tyes No flound, record location (scute number 4 side)  Marx wounds—achormalities on diagram or depris entanglement, proceiler damagnote if no wounds / abnormalities are  Not in Cestions	Straight length (NCTCH-TP)  Straight length (NCTCH-NCTCH- Common length (NCTCH-NC
ar or Tip Poster or No To 4	Coded wire tag scan? Tyes No if positive response, record location (flipper)  Citecked for living tag? Tyes No flound, record location (scute number 4 side)  Marx wounds—achormalities on diagram or depris entanglement, proceiler damagnote if no wounds / abnormalities are  Not in Cestions	Straight length (NCTCH-TP)  Straight width (NCTCH-NCTCH- cm in cm
ar or Tip Poster or Nortout	Coded wire tag scan? Tyes No if positive response, record location (flipper)  Citecked for living tag? Tyes No flound, record location (scute number 4 side)  Marx wounds—achormalities on diagram or depris entanglement, proceiler damagnote if no wounds / abnormalities are  Not in Cestions	Straight length (NCTCH-TP)  Straight length (NCTCH-NCTCH- Common length (NCTCH-NC
STORY OF MINOR OF MIN	Coded wire tag scan? Tyes No if positive response, record location (flipper)  Citecked for living tag? Tyes No flound, record location (scute number 4 side)  Marx wounds—achormalities on diagram or depris entanglement, proceiler damagnote if no wounds / abnormalities are  Not in Cestions	Straight length (NCTCH-TP)  Straight length (NCTCH-NCTCH- Common length (NCTCH-NC

CESERVER'S NAME / ADDI	RESSIPHONE: W.I. C Last Farrell	STRANDING DATE: Year 2000 Month LODay Z3
Affination Back Ban Nacio	omal Wildlife Refuge	Turtle number by day 🔘 🗌
AL 3SS . 4005 Sandp Eper	Rd., VA Beach, VA 23456	Field #:
Area code/Phage number(	757) 721-2412	State coordinator must be notified within 48 hrs: this was done byphone (757)437-6159emailfax (737)437-4933
3'.		
SPECIES: (chesk one)	STRANDING LOCATION:	County
CM = Green  COM = Green	Descriptive location (be specific)	
E. = Hawksbill	Back Bay Beach 10	
LK = Kempis ridley	back Baly Boider	(North)
UN = Unidentified	Latitude	Longitude
Sheak Unidentified if not		
cositive. Do Not Guess,	CONDITION: (check one)	FINAL DISPOSITION: (check one)  1 = Left on beach where found chair (eachrab) = 1.0.5
Phatos taxen?YesNo	= Fresh dead	- Car Surregit on beach anier control sanced in 1935 in 1995 i
Species verified by state	2 = Moderatery recomposed	y pareasa painted Sefore ouries. Thest Tilly
cordinator? Tyes The	🔔 3 = Severely decomposed	:X3 = Sarvaged X ail = cartic = what why?
	4 = Oried pardass	
(SEX: (check one)	5 = Skeleton, pones pniv	. <del>- , - , </del>
mmature_uncetermined		4 = Pulled up on peach/dune, pamiess*Yes*file6 = Alive, reloased
Female Male	TAGS: Contact state coordinator before	o = Alive, reidases 
TOW was sex determined?	disposing of any tagged animal!!	in the same of the
	Filoder tags present? Tyes XNo	8 = Left floating, not recovered: painteu? Yes' No
Tail length (adult only)	Check all 4 flippers. If found, record tag	9 = Disposition unknown, explain
th of tail beyond	number(s) tag location / return address	
caracacecm_in		"If painted, what color?
<u> </u>		CARABACE MEASUREMENTS /
Nuchal NCTCH	PIT (ag coan? YesNo	CARAPACE MEASUREMENTS: (see drawing)
	flound, record number / tag location	Using calipers Circle unit.
		[ Straight length (NGTCH-TIP)cm = in +t2 [ [Minimum length (NGTCH-NGTCH)cm = in +t2
	Coded wire tag soan? ☐ Yes ፫ No	Straight width (Widest Point)cm _in /3
	if positive response, record location (flipper)	Using non-metal measuring tape Circle unit
		Curved length MOTCH-T.P. 32.35 @min
	Oheoked for living tag? ∑Yes ∑√No	Minimum ength NCTCH-MOTOH 37.38 (m) in
	of found, record location (soute number & side)	Curved wigth (Widest Point) 34.69 m
		Circle unit
Posterior Posterior NCTOH		Weight actual ser kg b
3		
	<ul> <li>Mark wounds : apnormalities on diagrar</li> </ul>	ms at left and describe below indicate for only gear
1		ge, epibiota, papillomas, emaciation, etc.]. Please
$\sim$ / $\sim$	note if no wounds / abnormalities are	
	Scutes starting t	e peel-UP (cff
	JOURS STATTING T	o pect of . c ti
	Eves have been e	aten
VETTON		1.1
	bleeding E blo	satel
$\nearrow$ $\searrow$ $\diamondsuit$		

CESERVER'S NAME / ADD	RESS / PHONE:	STRANDING DATE:
First Michael	M.I. C Last Facre	Year 2000 Month Og Day 18
Affiliation Back Bay Natio	onal Wildlife Refuge	Turtle number by day O
- Less 4005 Sandpipe	r Rd., VA Beach, VA 23456	Field #:
		State coordinator must be notified within 48 hrs:
Frea code/Phone number	(757) 721-2412	this was done byphone (757)437-6159
		emailfax (757)437-4933
SPECIES: (check one)	STRANDING LOCATION:	
CO = Loggernead	State Vissinia	County
CM = Green		County LCK Ray NWR
CC = Leatherpack	Descriptive location (be specific) <u>Sa</u>	
E: = Hawksbill	Jamiles Douth of Ba	CKBay NWR Beach Ramp W 075°53'48.78
i_i_K = Kempis ndiev		<u> </u>
UN = Unidentified	Latitude	Longitude
Sheck Unidentified if not		
positive. Do Not Guess.	CONDITION: (about and)	FINAL BIGBOSITION
	CCNDITION: (check one)	FINAL DISPOSITION: (cneck one)
Photos takenj? ⊡ Yes ⊡No	:= Fresh dead	= Left on deadh where round, dainteu?
decles ventied by state	lessi dead	
pordunator? 🔲 Kes 🚞 No	3 = Severely decomposed	Garagesali =sarvagesali =sarvagesal
	= = = = = = = = = = = = = = = = = = =	
SEX: (check one)	= 5 = Skeleton, bones only	
mmature_undatermined		4 = Pulled up on deadhidune, painteg 17es*1.5
Female _ Male	TACCLO	6 - Aimo cologgad
mow was sex determined?	TAGS: Contact state coordinator before	7 = Alive, taken to renab, facility, where?
Necropsy	disposing of any tagged animal!!	
Tail length (acult only)	Filipper tags present? Yea Yo	8 = Left floating, not recovered: painted?Yes*No
gin of tail beyond	Check all 4 flippers. If found, record tag	9 = Disposition unknown, explain
carabacecm_n	number(s) / tag location / return address	
		"If painted, what color? FluoresCtn+ Crans
Nuchai		CARAPACE MEASUREMENTS: (see drawing)
Ed_40704	PiT tag coan?	
- Jakin	f found, resort number / tag location	Using calipers Circle unit.
		Straight length (NGTCH-TIP)cm in
		Minimum length NCTCH-NCTCH, emu n
	Coded wire tag scan? Tyes No	Straight width Widest Point, am in
	ficestive response, record location (flipper)	Using non-metal measuring tape Circle unit
market in the second	,	Surved length NCTCH-T.P' Mr. 2m in
	Checked for living tag? ☐Yes ☑No	- Minimum length MOTOH-WOTOH- <b>〜 公名 「企</b> 飾」n ***
	ficund, record location (scute/number & side)	or Surved width (Midest Point) APP om in
	(3.5.5.4.)	Circle unit
sterior Posterior		Weight 📃 actual 门 est kg = c
المعادية الم		
12 M C 64 2	Mary younds I shoot mailtion on discours	no at lost and accorde parature parature at a case and
( )		ns at left and describe below indice tar or but gear
) (		ge, epiblota, papillomas, emaclation, etc Please
	note if no wounds / abnormalities are	
	*Looke like it had he	en run over, scutes missing
	still has some flesh	
		avapace missing
The state of the s		
Y W P		
/ Ray	Collected tissue/sk;	in sample.
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	A MAY NACIOS ON INDE	JE ( ) .

		NETWORK - STRANDING REPORT
OBSERVER'S NAME / AD	DRESS / PHONE:	STRANDING DATE:
Affiliation Back Park V	M.I. T Last Williams	Year 2000 Month 09 Day 0 7
Anniation Back Say Nat	ional Wildlife Refuge	Turtle number by day OII
/ ess 4000 Sandpip	er Rd., VA Beach, VA 23456	Field #:
		State coordinator must be notified within 43 hrs.
Area code/Phone number _	(757) 721-2412	this was done byphone (757)437-6159
SPECIES: (check one)	STRANDING LOCATION:	
CC = Loggerhead	State VA	
CM = Green		County Virginia Brach
CO = Leatherback	Descriptive location (be specific)	0.7 Miles North of Refuge
☐ El = Hawksbill	heach ramp	J
LK = Kemp's ridley UN = Unidentified		
Check Unidentified if not	Latitude	Langitude
positive. Do Not Guess.		
	CONDITION: (check one)	FINAL DISPOSITION: (check one)
Photos taken? <u>"</u> Yes <u>X</u> No	0 = Alive	1 = Left on seaon where found, painted?/es*hoi5.
Species venified by state	📃 1 = Fresh dead	2 = Burled:on beachoff beach.
cordinator? Tyes XNo	∑ 2 = Moderately decomposed	agreed a supley wife a second a Total
	3 = Severely decomposed 4 = Oried parcass	3 = Sarvaged:aiispants what why )
SEX: (check one:	= 5 = Skeleton, bones only	Salvaged: _ ail X partis meathing  All Salvaged: _ ail X partis meathing  Muscle Solve From Trent left film  Given to Unitive Standar, Center form  Sale Ruled in Acceptage Associated  Sale Ruled in Acceptage Associated  Sale Ruled in Acceptage Associated  Sale Ruled in Acceptage  Sale Ruled in A
mmatura incetermined	)	4 = Pulled up of Seachtroune, painted XYes* _110
Female Male	TAGG 6	
Fow was sex determined?	TAGS: Contact state coordinator before	re: 7 = Alive, taken to renab, facility, where?
Necropsy	disposing of any tagged animal!!	
Tail length (actutionly)	Floger tags present? Tyes No	☐8 = Left floating, not recovered: painted? ☐Yes* ☐No
gth of tail beyond	Check ail 4 flippers. If found, record tag number(s) / tag location / return address	9 = Disposition unknown, explain
uarabace om in	manufaction and the same and th	"If painted, what color? fluntescent cours
A		n painted, what color? TIGET 25 (1917) C.C. U.S.
Augusta Nuchai		CARAPACE MEASUREMENTS: (see drawing)
icd HOTOH	PIT tag scan? Tyes 🔀 No	Haiam and in the
	if found, record number / tag location	Charles and Tale Trop
		- Tigistraight length (40 (0.54 P)cmn - Minimum length (NOTOH-NOTOH )cmn
		Chesiant whath parties as De
マルイール・コー	Godec wire tag scan? ☐ Yes 🔀 No	
	if positive response, record location (flipper)	
		Curved length (NCTCH=T F) 67.5 cm n
	Checked for living tag? Yes X No	Minimum length (NOTSH-NOTSH 66.5 cm) in Curved width (Widest Point) 68 cm) in
	f found, record location (soute number 3 side)	
sterior		Circle unit $\longrightarrow$ Weight $\longrightarrow$ actual $\longrightarrow$ est.
rg:set TIP Posterior		As the state of th
Ŕ		
	viarx wounds / abnormalities on diagra	ams at left and deconbe below (note tar or oil, gear
,	or dechs entanglement, propeller dam	iage, epiciota, papillomas, emaciation, etc.). Please
$\sim \sim \sim \sim$	note if no wounds / abnormalities a	re found.
	KAROCATES COMMON	of for measurements) No
	Visible worners. Se	everely bloated; socites on
12日子	- caraptine are sepa	
		1()
Y W A		ed and rear flipters,
/ RA \	- strong currents u	with NE words ~ 20 minh could
	attribute to recent	increased in the standard

OBSERVER'S MAME / A	THE THE AND SALVAGE	NETWORK - STRANDING REPORT
OBSERVER'S NAME / AD	DORESS / PHONE:	STRANDING DATE:
Affiliation A	- M.L. J Last <u>Campomizzi</u>	Year 2000 Month @@Daylol6
Dag C	National world to 0.6 -	Tuglo sumpos is a series [Old] Day[Old
Joress 4005 Sanda	eiper Rd, VA Beach, VA 2345	Turtle number by day 03
	1 Beach, 1/1 234)	6 Field #:
Area code/Phone number		State coordinator must be notified within 48 hrs.
		this was done bypnone (757)437-6159
SEECIES, Ash		<u>email</u> fax (757)437-4933
SPECIES: (check one)	STRANDING LOCATION:	
SM = Green	3: //	County 1/1 a.
= OM - Green		County VA Beach
= 50 - Leadherback = Ei = Hawkspill	Descriptive (coation (be specific) Fa	alse Cape State Park
i= Kemp singley	TOTAL NORTH OF B	Carbour Hill, near border between
= - Addition of maley	33/7 474 000	Ray NWR
Sheck Unidentified if not	Latitude	congitude
positive. Do Not Guess.		
poormive. Do Aor Guess.	CONDITION: (check one)	SINAL DIODOGITION
2	0 = Agive	FINAL DISPOSITION: (check one)
Photositaken? Tyes Mai Species verified by state	= 3 = 7 esn dead	☐ 1 = Cert on pelson where round, dainted* ☐ Fest ☐ Nor5 ☐ 2 = Buned* ☐ on pelson ☐ off pelson ☐ one of the person is the son
Species verified by state	☑ C = Moderate:v decomposed	The graded, This peads, This seats
coordinator? /esNo	== 3 = Severely decomposed	cardado painted person puned?
SEX: (check one:	<u> </u>	
ock (check one)	$_{-}$ 5 = Skeleton, bones only	
mmature, undetermined		✓4 = Pulied up on peach/dune, painted <sup>®</sup> ✓ Mes*No
Female Male	TAGS: Contact state coordinator befo	b = Alive, released
TOW Was sex letermined?	disposing of any tagged animal!!	re :7 = Alive, taken to renap, facility, where?
= Necroosy	Filoper tags present? Tyes V No	
Tail length laduit only	Check all 4 flippers. If found, record tag	8 = Left floating, not recovered: painted?Yes*No
Length of tail beyond	number(s) , tag location / return address	9 = Disposition unknown, exciain
carabacecmilin		"If painted, what polor? Ording?
A		in painted, what solory Orcing ?
Nuchai NCTCH		CARAPACE MEASUREMENTS: (see drawing)
	PiTitag scan?Yes ☑ No	
	if found, resord number / tag location	Christian league 1 0701 770
		Straight length (NOTCH-TIP)cm _n
		Minimum length NCTOH-NCTOH sm _n
7 - X	Coded wire tag scan? ☐ Yes ☑ No	Straight width (Widest Point)om _n
	floos, tive response, record location (flipper)	Using non-metal measuring tape Circle unit
		Curved length NOTCH=T,P) 79 2 cm c
	Checked for living tag?Yes Mo	Minimum length NCFCH-WCTCH 73.0 cm c
	if found, record location (soute number 3 side)	Curved width Widest Point N/4 am a
sterior 4		Circle umt
rg.nak TIP Posterior		Hight I actual I est
	Mark wounds (appormalities or discer-	ime at left and gooden and
i ·	Cr denris entanglement propolled to	ims at left and describe below (note tar or oil, gear
	note if no wounder telegraphic land	age, epibiota, papillomas, emaciation, etc Please
	note if no wounds / abnormalities ar	e found.
	Lest side of body musin	a: both flippers
	40% of Carponce missing	and & of Scutes on right side (x)
	most internal organs m	issing
400	missing sees scales on top of head (x)	
/ Re Y	myssele & Barnacles of cover	
	Collected right front flipp	er for sample
•		

CESERVER'S NAME / AD	DRESS / PHONE:	GETWORK - STRANDING REPOR
First Andrew	M.I. J Last <u>Campomizzi</u>	STRANDING DATE:
"Fliation Back Box N	ational wind life Refuge	Year 2010 O Month Old Daylo 6
dress 4005 (- 1	arional Whallte Refuge	
jana	piper Rd., VA Beach, VA 234	<u>t56</u>
		State coordinator must be notified within 48 hrs
<sup>4</sup> rea code/Phone number _	157-721-2412	this was done byphone (757)437-6159
SPECIES: (check one)	STRANDING LOCATION:	
CC = Loggernead	31-1-1-1-1	Cause 1/4 Page
CM = Green CC = Leatherback	Descriptive location (be specific) Bac	County VA Beach
= 50 - Caatherback = Elj = Hawksbill	about the least out	E Bay NWR
= LK = Kemp sindley	about 1 mile south	of retuge beach ramp
_ UN = Unidentified	2111100	
heck Unidentified if not	Catitude	Longitude
sitive. Do Not Guess.		
	CONDITION: (check one)	FINAL DISPOSITION: (check one)
otos taken? <u>Yes Kic</u>		TitAL bid-Position. (check one)   '☑': = Left on beach where 'outro painted'
edies verified by state	1 = Fresh dead	2 = Buried: in secon uf peach
cramatory Tives Tyro	∑ 2 = Moderately decomposed	pardass painted before our early the second
	3 = Severely decomposed	
SEX: (check one)	4 = Oried pardass = 5 = Skeleton, pones only	
mmature, undetermined	3 - Skeleton, Jones Jmy	Tita Builtad to an account
Female Vlale	71.00	4 = Pulled up on peach/dune. painte inYes*No 6 = Alive, released
ow was sex determined?	TAGS: Contact state coordinator before	7 = Alive, taken to rehabilifactifity, where?
Necropsy	disposing of any tagged animai!!	
Tail length (acuit only)	Filoper tags present? Yes Mo	8 = Left floating, not recovered painted? Yes* No
angth of tail beyond	oneck all 4 flippers. If found, record tag	9 = Disposition unknown explain
arabacesm in	number(s): tag location / return address	
m		"If painted, what solor? prange
Nuchai		CARABACE MENCHES
NG-CH	P¹T tag scan? ☐ Yes ☑ No	CARAPACE MEASUREMENTS: (see drawing)
	figund, record number / tag location	Using calipers Circle unit
		, Straight length (NOTCH-TP)sm _n _
		Minimum length NGTCH-NGTCH cm. in
	Coded wire tag scan? ☐ Yes ☑ No	Straight width (Midest Point)
	of positive response, record location (flipper)	Using non-metal measuring tape   Circle unit
		Curved length MOTCH-TLP 98.0 m
	Citesked for living tag? Yes No	Minimum length MOTCH-NOTCH 96.5
	ficund, record location (soute number & side)	Ourved width (Widest Foint) 92.4 65 5
		Circle unit
Posterior NOTCH		Weight = actual = actkg = c
	<u> </u>	1
$\mu^{\prime} \lambda$	Mark younds / appormalities on diagrams	s at left and describe below (note tar or all gear
	Of debris entanglement, propeller damage	e, epibiota, papiliomas, emaciation, etc., Please
	note if no wounds / shnormalities and	s, epiblota, papillomas, emaciation, etc.). Please
/ X X X X X X X X X X X X X X X X X X X	note if no wounds / abnormalities are	
	Edge of Cargoge Posterior	of right front flipper broken
	60% of Carapace Covered	with barnacles
A M M		
1 @ a \		

dress 4005 Sandpi	M.I. I Last <u>Camponizzi</u> stional wildlift Refuge eer Pa. VA Beach VA 2345	STRANDING DATE: Year 20 (c) Month (a) Pay (a) (b) Turtle number by day (a) (c) Field #:
Area code/Phone number	5-3-251-2-13	State coordinator must be notified within 48 hrs; this was done byphone (757)437-6159emailfax (757)437-4933
SPECIES: (check one)  CC = Loggerhead  CM = Green  DC = Leatherback  El = Hawksbill  LK = Kemp's ndley  ON = Unidentified  Check Unidentified if not positive. Do Not Guess.	Descriptive location (be specific) Bac	County <u>VA</u> Beach  K Boy NWR, on the North Prach  Camp and Little Silend City Park  Longitude
Photos taken? Yes Mho Species verified by state coordinator? Yes Mho SEX: (check one)	CONDITION: (check one)  3 = Alive 1 = Fresh dead 2 = Moderately decomposed 3 = Severely decomposed 4 = Dried carcass 5 = Sheleton bones only	FINAL DISPOSITION: (check one)  ☑1 = Left on beach where found, painted? ☑1 yes* ☐ Not5 ☐2 = Buried: ☐ on beach . ☐ off beach carcass painted before our ed? ☐ Yes* ☐ No ☐3 = Salvaged: ☐ aif ☐ partiol. what/why?
mmature, undetermined Female Male How was sex determined? Necroosy Tail length (adult only) Length of tail beyond carabade cm / in	TAGS: Contact state coordinator before disposing of any tagged animal!! Filipper tags present? Yes No Check all 4 flippers. If found, record tag number(s) / tag location / return address	4 = Pulled up on beach dune, painted? Yes* No 6 = Alive, released 7 = Alive, taken to renab, facility, where?  8 = Left floating, not recovered; painted? Yes* No 9 = Disposition unknown, explain
Nuchal NOTCH	PIT tag scan? Yes Mo If found, record number / tag location	CARAPACE MEASUREMENTS: (see drawing) Using calipers Straight length (NOTCH-TIP) Minimum length (NOTCH-NOTCH) cm / in
	Coded wire tag scan? Yes No If positive response, record location (flipper) Checked for living tag? Yes No If found, record location (scute number & side)	Straight width (Widest Point) cm in Using non-metal measuring tape Circle unit Curved length (NOTCH-TIP) NA cm in Minimum length (NOTCH-NOTCH) NA cm in Curved width (Widest Point) NA cm in
Posterior Posterior NOTCH		Weight actual sest. Circle unit
	note if no wounds / abnormalities are	
	contest side unable to Plastron broken in 3 place	missing, Only about & remaining take Carapace measurements.

# Back Bay National Wildlife Refuge Sea Turtle Stranding Report

Fort Story, Resort Strip, and Croatan Beach

Date 7/6/00

Turtle # By Day

Observer's Full Name Michael ( Facerel)
Location For ISLOCY ( Pacerel)

Experies Colone Beach Parking ( Petric) Sound Page)
Species

Condition 3

Remarks Missiry head, extremely decomposed, Cares Deal E broken in Haid to I.D in this Condition, meetly as a matter to Syerhead

Curved Length (cm) (20,96)

Sol accele to

CODES: SPECIFS: OC = leatherback EL = Hawkshill CM = Green Nuchal Notch

1k = Kemp's udley

COMPITION OF TURILE UN - Unidentified M155111 Posterior

2 Moderately decomposed (3.3) Severely decomposed 4 = Dried carcass l = Fresh dead 0 = Alive

5 = Skeleton, bones only

Marginal lip

Date 1/2/00

Furtle # By Day

Observer's Full Name Michael C Faire |

Location Sand bridge, shorth of Portlos Island Rel

The frest (construction) of house 3216 single lider Rel

Species (C.

Condition 2

Remarks

Forty Smell Tortle Diaded, Still had some fleshy

Mederical Still on Skyll had some fleshy

Curved Length (cm) (50, 16 Curved Width (cm) 53,47

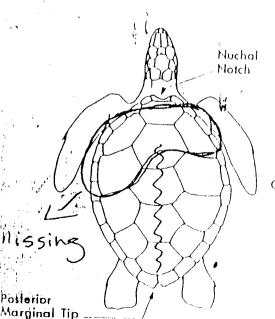
CODES: Nuchal SPECIES Notch CC - Loggerhead CM = Green DC - leatherback El = Hawkshill 1K - Kemp's ridley Utt - Unidentified COMPILION OF TURILE () = Alive rides 1 - Fresh dead Missimo (2) Moderately decomposed 3 = Severely decomposed 4 = Dried carcass 5 = Skeleton, bones only **Posterior** Marginal Tro

## Back Bay National Wildlife Refuge Sea Turtle Stranding Report

Fort Story, Resort Strip, and Croatan Beach

Date  $\frac{4}{30}$   $\frac{100}{00}$ Observer's Full Name Michael C. Farrell Location & Miles North 63rd St. Beach Species Losse (hear) (cc)
Condition Severly Decomposed (3)
Remarks High Tide, Drassed Tur-lle up
onto beach sates missing

Curved Length (cm) 91, 44 Curved Width (cm) 78,74



#### CODES:

SPECIES:

(CC Dloggerhead

CM = Green

DC = Leatherback

El = Hawksbill

1K = Kemp's ridley

UN = Unidentified

### CONDITION OF TURTLE:

0 = Alive

1 = Lesh dead

2 = Moderately decomposed

3 D Severely decomposed

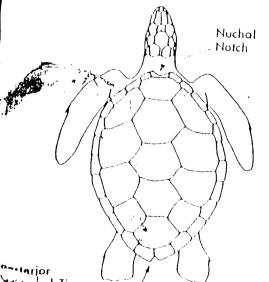
4 = Dried carcass

5 = Skeleton, bones only

## Back Bay National Wildlife Refuge Sea Turtle Stranding Report

Date  $\langle \xi | 2 \partial / \xi \xi \rangle$ Turtle # By Day Observer's Full Name Eric Dagan
Location 3500 bolock of Smillion Rd. Condition remarks Unable to move because of size, compace heavily sliced ad cracked, prob. by bont propeller, tound upside down, w plastron Remarks

Curved Length (cm) unable to measure Curved Width (cm)



#### CODES:

SPECIES:

CC = Loggerhead

CM = Green

DC = leatherback

El = Hawksbill

LK = Kemp's ridley

UN = Unidentified

## CONDITION OF TURTLE:

0 = Alive

1 = Fresh dead

2 = Moderately decomposed

3 = Severely decomposed

4 = Dried carcass

5 = Skeleton, bones only

# Back Bay National Wildlife Refuge Sea Turtle Stranding Report

Oate 8 20 00 urtle # By Day 1 bserver's Full Name Eric Duran ocation 3500 block of Soudbridge Beach. pecies CC

ondition ampuco length. It was upside down in the sand and I was unable to turn it are the measurement. It had no upside configure should have appeared to be deep, long gashes in the shell

arved Length (cm) unable to determine probably caused arved Width (cm) unable to determine by a boot properties.

VM5m stranding Team





CC = Loggerhead

CM = Green

DC = Leatherback

El = Hawksbill

IK - Kemp's ridley

UN = Unidentified

### COMUNION OF TURTLE:

0 = Alive

1 = Fresh dead

2 = Moderately decomposed

3 = Severely decomposed

4 = Dried carcass

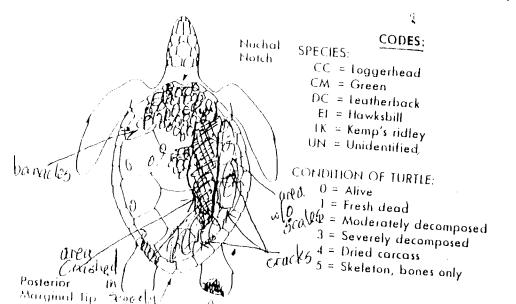
5 = Skeleton, bones only

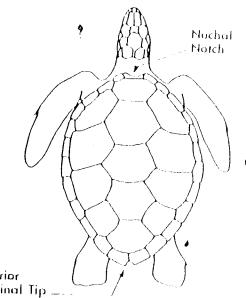
# Back Bay National Wildlife Refuge Sea Turtle Stranding Report

Fort Story, Resort Strip, and Croatan Beach

Date 8/17/00 Turtle # By Day | Observer's Full Name Low Duran Observer's Full Name Lord Flagury
Location Ft. 5 lory Beach, to the North of the
Rublic Beach Entrance, past sandlings, in mont of
Reportation
Condition 1 Remarks width and length measurements prohibly inaccurate due to missing camptice sections and become brachagle encountration, neck bloated moderately rear right filmer broken loose and missing scalation, probable boat strike, 18% of

Curved Length (cm) < 1-1> 51,0cm < 1-1> 51.9cm Chicked in Curved Width (cm) IT MISSIM





CESERVER'S NAME / AD. First	DRESS / PHONE  M.I. — Last — Lonal Wildlife Refuge er Rd., VA Beach, VA 23456	STRANDING REPORT  STRANDING DATE:  Year 2010 Wonth May Day E  Turtle number by day OT  Field #:
Area code/Phone number _	(757) 721-2412	State coordinator must be notified within 48 hrs: this was done byphone (757)437-6159emailfax (757)437-4933
SPECIES: (check one)  CS = Loggernead  CM = Green  CC = Leatherback  EI = Hawksbill  LK = Kemb sindley  UN = Unidentified  Check Unidentified if not	- Walls Wash Contain	County, VA Brach  Oust North St North, Crowling corder of Folse Cape State York.  Longitude
Photos taken? Thes Zing Species ventiled by state coordinator? Thes Zing Sext. (check one)  This measure, undetermined	SCNDITION: (check one)  D = Alive  1 = Fresh dead 2 = Moderately decomposed 3 = Severely decomposed 4 = Oried darcass 5 = Skeleton, bones only	FINAL DISPOSITION: (check one)  [Z] = Let on secon where 'oung, painted'
Female Male Tow was sex determined? Neorodsy Tail length (adult only) 9th of tail beyond parabade om lin	TAGS: Contact state coordinator before disposing of any tagged animal!! Fiboer tags present? Tyes No Check all 4 flippers. If found, record tag number(s), tag location / return address	## Failed do on Jedon dune, painted?Yes*No
Still Nuchai	Pin tag span? Til Yes Til No If found, record number / tag location	CARAPACE MEASUREMENTS: (see drawing) Using calipers Circle unit Straight length NCTCH-TIP) cm in
the towns	Socied wire tag scan? Yes No focation (flipper)  Cleaked for living tag? Yes No found, record location (scute number 2 side)	Using non-metal measuring tape Circle unit  Curved length (NCTCH-TIP) \( \) \(
Posterior Posterior Victorial Victor	Mark wounds achormalities on diagram or depris entanglement, propeller damagnote if no wounds / abnormalities are	Weightactualect. Circle unit
	There is decomposed and secret of consolidation of the property of the most of the property of	d deflated with skull attached absent somes of carapare in original process inside - scales /skin and tippers - bump on right hind figgers - bump on right hind figgers - bump on and the figure is simplen and the body mersurements

CESERVER'S NAME / AL	DOBESS ABUSING AND SALVAGE	NETWORK - STRANDING REPORT
First Wayses - of a G	DUKE22 / PHONE:	STRANDING DATE:
First Unvistopher	M.I. S Last Wie Gov	OTRANDING DATE:
" "duvii back Ray Va+	7 1 1727 17	Year 2010 W Month Day Z
ress 4005 Sandnin	ver Pri W. P.	Turtle number by day 72
	er Rd., VA Beach, VA 23456	Field #:
		Ciano - /
Area code/Phone number _	(757) $721-2412$	State coordinator must be notified within 48 hrs;
		and vad dutte by phone (757) 427 care
CCCOLCO		email fax (757)437-4933
SPECIES: (check one)	STRANDING LOCATION:	
	C'ATTONIAG LOCATION:	
CM = Green	State Viwatinio	County VA Box
DC = Leatherback	Descriptive (ocation (be specific)	Togg and the left
= El = Hawksbill	beach many	FRUITA DE STOS DOWN NING
K = Kemo's naley	- Level 1 Court	
UN = Unidentified	·	
Chack Unido-45	Latitude	20011100
Check Unidentified if not		Eangitude
positive. Do Not Guess.		
/	CONDITION: (check one)	EINAL DISPOSITION
Photos taxen? Tyes ZNo	:⊡r0 = Alive	FINAL DISPOSITION: (check one)
Species venified by state	i = Fresh dead	The state of the second control of the state
saids verified by state	2 = Moderately decomposed	
scardinator Tyes Zinc	3 = Severely decomposed	cardass painted before cure. The
	= 1 = Oried parcass	Z3 = Saryageg: Tail 1 Dame argonizms = 110
SEX: (check one)	= 5 = 00 cote =	Z3 = Sawagery all Z partic what may 2
	5 = Skeleton, pones only	
Female Wale		Z4 = Puried up on peachydune, painted
TOWNER THE WORLD	TAGS: Contact attended	= 6 = Alive, released
Tow was sex determined?	TAGS: Contact state coordinator befor	Te : Te Alive toxon to rener to
Necropsy	uisposing of any tagged animall!	7 = Alive, taken to renab, facility, where?
Tail length (adult only)	- Puber ags present?   Yes VE Mo	0 - 1 - 2 2
igth of tail beyond	oneck all 4 flippers. If found record tog	8 = Left floating, not recovered: painted?Yes*No
caracacecmi/n	number(s) / tag location / return address	9 = Disposition unknown, explainYes*No
<u></u> ст. п		
Fre 4 utes 401	1:00	"If painted, what color? Nance
Nuchai De	Cur+)	
NOTCH	PIT tag scan? Yes No	CARAPACE MEASUREMENTS: (see drawing)
	if found speed arranged to	
	if found, record number / tag location	Straight length 1907011 77
		- Parangiti Atolica (Procession and Association and Association Atolica)
		- Ammindin letigri (NOTOF-NOTOF)
	Coded wire tag scan? Tyes Who	Straight wirth (Midest Pount)
	if positive response, record location (flipper)	Sing non motal man
well the property of the prope	U Contract (apple 100900) (withhel)	
imparted imparted	Checked for hundred Till	Curved length (NOTCH_T.P)   104   Km In
		Minimum length (NOTCH-NOTCH \CZS cm) in
The state	If found, resorta location (scute number & side)	Surved width (Widest Point)
starior — 1 X V		
arginal Tip Posterior		- Waight - actual - Circle unit
al entropied	/	Weightastualestkgb
and the second	Mary	
Groon	- Mark Mounds / abnormalities on diagrap	ns at left and describe below indice tar or sit, gear
	or debris entanciement propellos damas	ns at elt and decembe below (note tar or chi, gear ge, epiblota, papillomas, emaciation letti.). Please
$\sim$	note if no ways 4- / 1	ge, epiblota, papillomas, emaciation 🚉 💎 Pleasa
/ `~ `	note if no wounds / abnormalities are	e,found.
	- Sever ly Montant Sic	the shretched the is
	plating blade	
	DECK ON	a head and bally - blocking
	Some swall private of on	12
Arachal	- Chir wall purios ich on	caragarce and head -
	Scrites solution arrest	- CA LAZAR 2 MINI - V - 1/2/1-
	The mineral	on hard - right front floger
/ Ra Y	impaired - mous he hi	1000
Jegy [	impaired - mous he hi	ten off at homsey ago
	impaired - mous se bit	Total Total

ORSEDVENIS MANE	UNID GALVAGET	TETWORK - STRANDING REPOR
OBSERVER'S NAME / AD	DRESS / PHONE:	STRANDING DATE:
1111SL F.C.C	M.I. S Last <u>Duran</u>	Year 2000 Month To Fina Time
mation Dhnwk		Year 2000 Month 07 Day 12
udress 4500 5	endpiper	Turtle number by day O
VICO NO	Beach UA 23456	Field #:
Area code/Phone number _		State coordinator must be notified within 48 hrs:
	(767) 721-2412	this was done byphone (757)437-6159
SPECIES		emailfax (757)437-4933
SPECIES: (check one)	STRANDING LOCATION:	
CC = Loggerhead CM = Green	State Vicainia	County Variation D
DC = Leatherpack	Descriptive location (be specific)	_ county virginia beach
Ei = Hawksbiil	270 black of Goale II	The Sandor age Beach offer the
LK = Kemp's ridley	- I'm DICE OF SCHOOL	_ County Virginia Beach the Sandbridge Beach efforthe Ler Rd in Virginia Beach.
UN = Unidentified		
Check Unidentified if not	Latitude	Longitude
positive. Do Not Guess.		
	CONDITION: (check one)	FINAL DISPOSITION (1)
Photos taken? <u>Yes</u> √No	= 0 = Alive	FINAL DISPOSITION: (check one)
Species venified by state	1 = Fresh dead	1 = Left on beach where found, painted? X7es*1.6(5) 2 = Buried: on beach / off peach:
coordinator?vesNo	' ≥ 2 = Moderately decomposed	Carcasa nainted before byses 2
30370 M12(01) 19S N0	3 = Severely decomposed	carcass painted before buried?Yes* No 3 = Salvaged: ail / partis!what/why?
SEX: (check one)	4 = Dried carcass	
mmature, undetermined	5 = Skeleton, bones only	
Female Maie		4 = Pulled up on beach/dune: painted? Yes* No
CW was sex determined?	TAGS: Contact state coordinator before	L_0 - Alive, released
Necroper Necroper	disposing of any tagged animal!!	☐7 = Alive, taken to rehab, facility, where?
= Necropsy	Fipoer tags present? Yes No	
Tail length (adult only)	Check all 4 flippers. If found, record tag	8 = Left floating, not recovered: painted?Yes*No
Length of tail beyond	number(s) / tag location / return address	9 = Disposition unknown, explain
carabacecmln		
<u> </u>		"If painted, what color? bright emage
Nuchal NOTCH		CARABACE MEASUREMENTS
Led South of the second of the	PIT tag scan? Tyes X No	CARAPACE MEASUREMENTS: (see drawing)
	If found, record number / tag location	Using calipers  Circle unit
		Straight length (NOTCH-TIP) cm / in .
		Minimum length (NOTCH-NOTCH) cm / in /
	Coded wire tag scan? Tyes X No	Straight width (Widest Point) cm _ in
	if positive response, record location (flipper)	Using non-metal measuring tape Circle unit
2 7		Curved length (NOTCH-TIP) the absence in
	Checked for living tag? XYes No	Minimum length (NOTCH-NOTCH)
	if found, record location (scute number & side)	Curved width (Widest Point) 60.5 cm in
sterior		Circle unit
rginal TIP Posterior		Weight ☐ actual / ☑ est
arec klacked		
$i = \sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{j=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{j=1}^{n} $	Mark wounds / abnormalities on diagrams	s at left and describe below (note tar or on, gear
	Or debris entanniement, propolitor damage	s action and describe below (note tarior on, gear
	note if no wounds / abnormalities are f	e, epibiota, papillomas, emaciation, etc.). Please
	abnormalities are f	ound.
	The neck and rear left fl	for were severely blooked.
	Mich of His live!	The court sect car throughout.
	There the outer layer	of skin-out most of the scales
	were missing from all aux	- the body. The general coloration
	of the galact	The general colors han
$\rightarrow$ $\rightarrow$ $\rightarrow$	c. the animal was contra	and gellow. There were A everly
1 Re 1	Spaced anshed slices on H	he carapace, the posterior marginal
	tion income makes as with	the constitution in posterior merginal
	1871 muchy	cut open the flesh appeared
	TELLIA MILLERY	

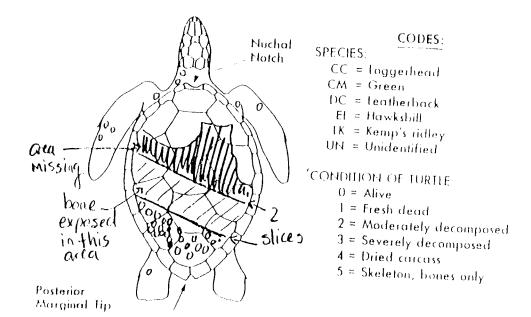
OBSERVER'S NAME / ADD	DRESS / PHONE:	STRANDING DATE:
Affiliation Back Back	M.I. C Last Farrell	Year 2000 Month 27 Day
Admidition Back Bay Nati	onal Wildlife Refuge	Turtle number by day 🕡 📗
ress 4005 Sandpipe	r Rd., VA Beach, VA 23456	Field #:
		State coordinator must be notified within 48 hrs;
Area code/Phone number	(757) 721-2412	this was done byphone (757)437-0159
		emailfax (757)437-4933
SPECIES: (check one)	STEAMENCLOCATION	
CC = Loggerhead	STRANDING LOCATION:	
CM = Green	State Virginia	County
DC = Leatherback	Descriptive location (be specific)	
CM = Green CC = Leatherback El = Hawksbill	2.6 miles From Back Box	Ramp
LK = Kemo's ridley	Found in the Surf	
UN = Unidentified	Latitude	
Check Unidentified if not		Langitude
cositive. Do Not Guess.		
	CONDITION: (check one)	FINAL DISPOSITION: (check one)
Sacra rayana TV	= 0 = Alive	1 = 1 of as resentance forms and the
hotos taxen? Tyes Xyo	i = Fresh dead	1 = Left on beach where found, painted ( Yes! No.5 ) 2 = Buried. Son beach of peach
decies ventied by state	2 = Moderatery decomposed	cardada painted before duried Tiles Tillo
odroinator? = ves \int vo	3 = Severely decomposed	X0 = Savagen all X pages was an all
0.57	4 = Oried pardass	X3 = Salvageor _ all X parts, what was you
SEX: (cneck one)	<u> </u>	TO TENDER TO THE TREE TO THE TOTAL TO THE TOTAL TO THE TOTAL THE T
mmature, undetermined		Z4 = Pulled up on beact/dune, painted X rest TNo
☐ Female ☐ Male	TACS. C	T : ID FIRMVE, Feleased / N
mow was sex determined?	TAGS: Contact state coordinator before	7 = Alive, taken to rehap, facility, where?
	disposing of any tagged animal!!	
Tail length (adult only)	Filoder tags present? Tyes X No	8 = Left floating, not recovered; painted?Yes*No
agth of tail beyond,	Check all 4 flippers. If found, record tag	9 = Disposition unknown, explain
carabace 9 6m / In	number(s) / tag location / return address	
53.45400		"If painted, what color? Orange
<u> </u>		
Nuchai NCTSH		CARAPACE MEASUREMENTS: (see drawing)
	PIT tag scan? ☐ Yes ☑ No	
	if found, record number / tag location	Steel State Control Time
		Straight length (NOTOH-HIP)cm /in
		Minimum length (NOTCH-NOTCH) cm //in
	Coded wire tag scan? ☐ Yes ☑ No	Straight width (Widest Point)cmcm
	if positive response, record location (flipper)	Using non-metal measuring tape Circle unit
		Curved length (NCTCH=TIP) 69 @m.
Partie of	Checked for living tag? Tyes XNo	Minimum length (NOTCH-NOTCH) 66.5 cm)/in
	if found, record location (scute number & side)	Corned wigh 'Alignes' Sound
	in the condition (about the most of side)	
terior Posterior		Circle unit Weight actual ` est kg _h
gundi TIP POSTENOT NOTCH		Weight actual BStKg -b
$\wedge$		
$\mathcal{I}' = \sum_{i=1}^{n} \sum_{j=1}^{n} (i - \sum_{i=1}^{n} (i - \sum_{j=1}^{n} (i - \sum$	<ul> <li>Mark wounds / abnormalities on diagram</li> </ul>	ns at left and describe below (note tar or oil gear
	<ul> <li>or debris entanglement, propeller damag</li> </ul>	ge, epiblicita, paplillomas, emactation, etc
	note if no wounds / abnormalities are	found
	Blooked Scutes of	oring off (eyes Still Intack.
		Jens City College
/F	Slight bleeding)	
ST VIV		<b>.</b>
γ <del>-</del> γ		
/ KA \		

## Back Bay National Wildlife Refuge Sea Turtle Stranding Report

Fort Story, Resort Strip, and Croatan Beach

Date (0/30/00
Tutle # By Day |
Observer's Full Name [ric Duran
Location Fort Story; 1/4-1/2 mi. South of Public
Veach access
Species C. carretta (CC)
Condition Fresh Dead (1)
Remarks 2 19. slices through shell. La perpierc
of shell missing > Viscera expresed. Shell section
w | Scutes attached, heavily encrusted w/ harnacles.

Curved Length (cm) 33.5(n-1); 32.5(n-0)Curved Width (cm) 29.5



Date (7 (4-0)
Furtle # By Day
Observer's Full Name Christoff W. M. Cher
Location 32 05 Sund Fielder PA

7.

Species C.C.
Condition
Remarks Que Slice of an Cirry (100 plan) Ap

LCCI Propertion small remarks on cirry (100 plan)

From A Cirry (100 plan)

Curved Length (cm)

To T

CODES Muchal SPECIES: Hotch CC = Loggerhead CM = Green DC = leatherback Et = Hawkshill 1k = Kemp's ridley UH = Unidentified COMBINOR OF TURILE 0 - Alive 1 = Fresh dead - Moderately decomposed 4 = Dried corcuss 5 = Skeleton, bones only Posterior Marymal lip

# Mack Bay National Wildlife Refuge Sea Turtle Stranding Report

Fort Story, Resort Strip, and Croatan Beach

Curved Length (cm)

CONDITION OF THAT SPECIES.

CC = Laggerhead

CM = Green

CM = Green

CM = Green

DC = teatherback

EI = Hawkball

IK = Nemp's ridley

UNI = Unidentified

CONDITION OF TURITE

CONDITION OF Alive

1 = Fresh dead

2 = Andersately decomposed

3 = Severely decomposed

4 = Direct carcuss

5 = Skeleton, bones only

Postbrior Will Marginal Tip

## Back Bay National Wildlife Refuge Sea Turtle Stranding Report

Fort Story, Resort Strip, and Croatan Beach

Date the 17-17'
Turtle # By Day 2.
Observer's Full Name (luisopher fischer
Location fassion) Luron of Trom acist only. Turn
Twint to humpon muster. Go to the left end of 180 is
Species
Condition
Corner.
Remarks
TVCCF, is the time the later of a description
Bright hum Plupper - Meserit manages.

Curved Length (cm) 711 (10/4) - 724 (14)

9

CODES: Muchal SPECIES: Motch CC = loggerhead M = Green = leatherback 🍜 Hawksbill 4K = kemp's ridley UH " Unidentified COMPINOR OF TURIER 0 = Ahve1 = fresh dead 2 = Moderately decomposed 3 = Severely decomposed 4 = Dried carcass 5 = Skeleton, bones only Posterior Marginal lip

## Back Bay National Wildlife Refuge Sea Turtle Stranding Report

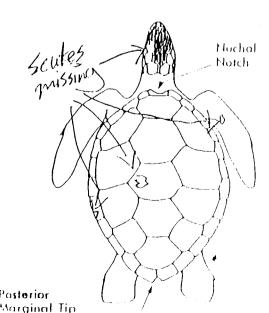
Fort Story, Resort Strip, and Croatan Beach

Date Ob-Ob-Ob

Turtle # By Day Z

Observer's Full Name Christer phonology which was a control of the control of

Curved Length (cm) 71.3 (with), 72% (43)
Curved Width (cm) 71.4



#### CODES:

SPECIES:

CC = toggerhead

CM = Green

DC = Leatherback

El = Hawksbill

1K = Kemp's ridley

UN = Unidentified

#### COMDITION OF TURILE:

() = Alive

1 = Fresh dead

2 = Moderately decomposed

3 = Severely decomposed

4 = Dried carcass

5 = Skeleton, bones only

## Back Bay National Wildlife Refuge Sea Turtle Stranding Report

Fort Story, Resort Strip, and Croatan Beach

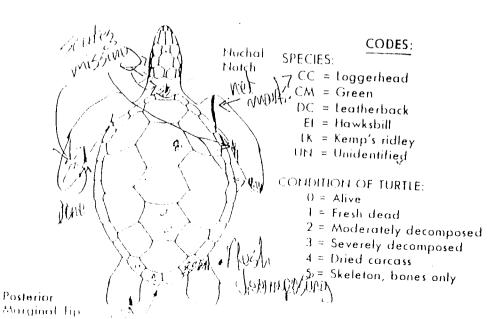
Date (12.76-10)

Turtle # By Day 1

Observer's Full Name ( hvistopher White Location (21) ( 12.60) ) Dehred White (110)

Species
Condition
Remarks Islanded bissiph work on yight
The remarks work on yight
The remarks was the series of t

Curved Length (cm) 70.2 (Whole), 728 (tige)



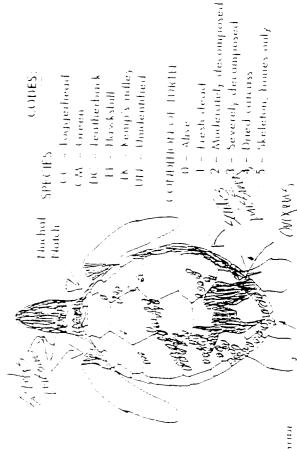
# Back Bay National Wildlife Refuge Sea Turde Stranding Report

Fort Story, Resort Strip, and Croatan Beach

Date  $\left( \frac{\partial^2}{\partial t} \cdot \frac{1}{L^2} \cdot \frac{1}{L^2} \right)$ Furthe # By Day  $\left( \frac{\partial}{\partial t} \right)$ 

Remarks Suider rensonary Proportion (12) (2) (2) (2) have contriber to 100 prince (12) for contribution (12) f Observer's Full Name (IndSpylar L. K. BEEV ( ondition Species

Christian in the Color of Child Curved Width (cm)



The strength file Posterior

OBSERVER'S NAME / ADDR	RESS / PHONE: M.I. T Last William S	STRANDING DATE:
First Sa(A	ALT LOS LIVILIONS	
Affiliation Basis Basis	VI.I Last	Year 2010 Month O 6 Day 6 9
Affiliation Back Bay Natio	nal Wildlife Refuge	Turtle number by day Oi
ess 4005 Sandpiper	Rd., VA Beach, VA 23456	Field #:
		State coordinator must be notified within 48 hrs:
Area code/Phone number _ (	757) 721-2412	this was done byphone (757)437-5159
The state of the s		emailfax (757)437-4933
2550150		
SPECIES: (check one)	STRANDING LOCATION:	
20 = Laggerhead	State // <del>// )</del>	County
CM = Green	Descriptive Ideation (he specific)	3 Miles south of Back
= CC = Leatherback	Remarks to call of the speciment of the	Character Date
Ei = Fawksbill	- Kay NWR'S Beach	ch ramp
= -\(\frac{1}{2} \text{ \text{demp is naley}}\)		
UN = Unidentified	Latitude	Langitude
Sheck Unidentified if not		<u> </u>
positive. Do Not Guess.	CCNDITION	FILL DIGGGGTTON
	CONDITION: (check one)	FINAL DISPOSITION: (check one)
Photocitaken? <u>T</u> Yes <u>T</u> No	) = Alive	= Left on pagen where found, painted 🏖 😥 🗀 No-S
Species ventied by state	= fresh dead	2 = Buried: on beach off beach
coardinator"YesNo	= 2 = Moderately decomposed	carcass painted before Junes? Till 495. Till 46
	= 3 = Severely decomposed	☐3 = Sarvaged: ☐ all / (_ partis, _ what way *
SEX: Icheck one:		
Z manus manus	5 = Skeleton, bones only	▼:
mmature, undetermined		· ∑4 = Pulled up on peach June, paintog ✓ res* ☐ list 
Female Viale	TAGS: Contact state coordinator before	
TC w was sex determined?	disposing of any tagged animal!!	7 = Alive, taken to rehab, facility, where?
Necroosy	Figure 1 and tagged annual Figure 1 and the Figure 1 and the Figure 2 and	
Tail length (adult only)	Check all 4 flippers. If found, record tag	8 = Left floating, not recovered; painted?Yes*No
gth of tail beyond	number(s) / tag location / return address	9 = Disposition unknown, explain
Jarabababmilin	in the second of	"If painted, what color?Orange
<u> </u>		If painted, what color?
Nucnal		CARARACE MEASUREMENTS.
NOTCH	Pin tag scan? Tes ViNo	CARAPACE MEASUREMENTS: (see drawing)
مريش المستعدد المستد المستعدد المستعدد المستعدد المستعد المستعدد المستعدد المستعدد ا	f found, record number / tag location	Using calipers Circle unit
	1 and 1 doors harried, 7 tag location	Straignt 'ength MOTCH-T.P"
		Minimum length (NOTCH-NCTCH: cm _n
TO CO	Coded wire tag scan? Tyes No	Straight width (Widest Point) om _n
	f positive response, record location (flipper)	Using non-metal measuring tape _ Circle unit
	- 1 333.076 (esponse, record rocason (hipper)	Curved length (NOTCH=TIP) 68.5 (cm) of
	Change for the control of the contro	Minimum length (NCTCH-NCTCH) 66.5 cm. n
	Checked for living tag? Yes No	· · · · · · · · · · · · · · · · · · ·
	flound, record location (scute number 3 side)	Curved width (Widest Point) 64.3 (cm) n
startur —		Since the second
Figure TIP Posterior NOTOH		Weight   == actual   == est.   == kg   c
NO 13		
$\sim$	Mark wounds I appormalities on diagram	s at left and describe below indicate far an gear
	or tears entendiament propeller damag	o anibiata passiomas amagistas as Place
_ / / _	or decris entanglement, propeller damag	e, epibiota, papiliomas, emaciation, etc. Please
	note if no wounds / abnormalities are	1
	Barnacles cov	erina carapace, Flesh
	A	
	- dined , skeleton	exposed on transt
	LaCil Cianan	·Kill and langer
	- 1477 + 1144 S	rull and neck
$\gamma \sim \forall$		

SECTION IN THE SECTIO	RANDING AND SALVAGE N	<u> IETWORK – STRANDING REPOR</u>
OBSERVER'S NAME / AD	DRESS / PHONE:	STRANDING DATE:
First	M.L. Tlast Williams	Year 2000 Month 66 Day 0 9
Mation Back Bay Nat	ional Wildlife Refuge	Turbo sumbor by gay 7
address 4005 Sandpin	er Rd., VA Beach, VA 23456	Turtle number by day 22
	, , , , , , , , , , , , , , , , , , ,	Field #:
Area code/Phone number _	(757) 701 0(1)	State coordinator must be notified within 48 hrs;
- 194 odder Holle Holling	1737) 721-2412	this was Jone byphone (757)437-6159
		emailfax (757)437-4933
SPECIES: (check one)	STRANDING LOCATION:	
✓ CC = Loggerhead	O	
CM = Green	State VA	_ County Virginia Keach
CC = Leatherback	Descriptive location (be specific) (	County Virginia Beach
= E = Hawksbill	Bay NWR'S RE	rach Ramp
= L{ = Kemp's ndlev		
UN = Unidentified	Latitude	Conditions
Check Unidentified if not		Congitude
positive. Do Not Guess.	00117	
	CONDITION: (check one)	FINAL DISPOSITION: (check one)
Photos taken?	0 = Alive	1 = Left on beach where found insurant = zee, =
poecies ventied by state	:= Fresh dead	2 = Buried: on beach off peach
sportinators Tyes This	2 = Moderately decomposed	cardasa painted before hime of Tillian Tillian
	3 = Severely decomposed	🔲 3 = Salvaged: 🗀 all 🔀 partici - what why.
SEX: (check one)	4 = Oried parcass	To = Salvaged: Tall X particle what why the letter the true of the
mmature, undetermined	5 = Skeleton, bones only	$\sim$ VIGUILA IMPLIAR Y PARE THAT $\sim$ 1 $\sim$ 1
Female Male		- ' A - Fulled up on begon/dune; painted? V/Ac* - TA/A
now was sex determined?	TAGS: Contact state coordinator before	o = Alive, released
Mectobsy Teletimities >	disposing of any tagged animal!!	7 = Alive, taken to rehap, facility, where?
Tall engin /aguit	Fipper tags present? Tyes No	
Tail length (adult only) = lagth of tail beyond	Check all 4 flippers. If found, record tag	8 = Left floating, not recovered: painted? Yes' No
= mattrol rall beyond	number(s) / tag location / return address	9 = Disposition unknown, explain
caradadeom. n		15 00 000
1 <sup>th</sup>		"If painted, what color? Orange
Huchal Nuchal		CARARACEMENSUS
NOTCH NOTCH	Pli tag scan? Tyes No	CARAPACE MEASUREMENTS: (see drawing)
	if found, record number / tag location	Using calipers Circle unit
		Straight length (NOTCH-TIF)cm . in .
		Minimum length (NGTCH-NGTCH)
	Coded wire tag scan? Yes No	Straight width (Widest Point) an .n
	If positive response, record location (flipper)	Using non-metal measuring tape   Circle unit
		Curved length NOTCH-TIP 101 Cm in
	Checked for living tag? Tyes X No	Minimum length NCTOH-NCTOH 78.4 (20) n
	if found, record location (scute number & side)	*Curved width Widest Point) 93 (m) n
stenor Posterior		Weight actual est. Circle unit
четен мотон	•	
<u>"</u> ^	Messylvania	
1	Mark wounds / abnormalities on diagrams	s at left and describe below indice tar or cil. gear
	- 1 400.13 ontanglernerit, brobeller damada	Penininia naniliomas emaciation at 1 pri
	note if no wounds / abnormalities are f	ound
	extremly	bloated, all scutes
1	- are obsent	
Y — Y		
/ (2) (1)		

Address 4005 Sandpiper Area code/Phone number(	M.L.E Last Tewey nal Wildlife Refuge Rd., VA Beach, VA 23456	STRANDING DATE:  Year 20 0 0 Month 0 6 Day 0 3  Turtle number by day 0 2 A  Field #:  State coordinator must be notified within 48 hrs; this was done bypnone (757)437-4933
SPECIES: (check one)  SPECIES: (check one)	STRANDING LOCATION: State Virginia  Descriptive Scation (be specific) was  Latitude  CONDITION: (check one)	County Virginia Beach sh Woods FCSP  Longitude  FINAL DISPOSITION: (check one)
Photos taxen? Tyes Xivo Species verified by state oprainator? Yes Xivo	☐ 0 = Alive ☐ 1 = Fresh dead ☐ 2 = Moderately decomposed ☑ 3 = Severely decomposed	= 1 = Left on decon where round, pointed 1 ≥ 7 est = 14d 6 = 2 = Buried: on decon = off decon cardood coming before duried 1 rest = 14d = 2 = 3 atvagen = oin = dect or ones why 1
SEX: (check one) mmature, inceterminedmailMaileow was sex determinedvecroosyaii length (adult only)angth of tail beyond om	### = Ories parcass    5 = Skeleton, bones pnly    TAGS: Contact state coordinator before       disposing of any tagged animal!!     Filoper tags present?   Yes  No  No  No  No  No  No  No  No  No  N	4 = Puried up on beach dune, painted?   rest   No   6 = Alive, released   7 = Alive, taken to renab, faculty, where?   8 = Left floating, not recovered; painted?   Yes'   No   9 = Disposition unknown, exclain
Nucrai Nucrai No To Hed	PiT tag scan?	CARAPACE MEASUREMENTS: (see drawing) Using calipers Circle unit Straight length (NCTOH-TIP) cm in Minimum length NCTOH-MICTOH cm in Straight width (Nadest Point) cm in
	Coded wire tag span? ☐ Yes ☒ No fibbositive response, record location (flipper)	Using non-metal measuring tape Gircle unit Curved length NCTOH-TIF! 81 cm in Minimum length NCTOH-VCTOH 789 cm in
ater ur Rostenor NOTOH	Checked for living tag?Yes : Mo found, record location (soute number & side)	Gurved width Widest Point
		ns at left and describe below indication of gearinge, epiblicia, papiliomas, emaciation, etc Please found.

OBSERVER'S NAME / AD	DDCCC / BUOME		STRANDING BATE	TILL OIL
ASSISTED TO THE PROPERTY OF	_M.I Last (ACGON	į	STRANDING DATE: Year 2000 Month 2000	- 7
""allon1500/ ">	ZU NWP	<del></del>	Turtle number by day 27	ay 1/2 1/2
dress Lone 2	said Diver to Villego	2.1/4	Field #:	
1 2 500 00do (C)	23456	<del>:-,}//-</del> . [	State coordinator must be notified	d within 18 hee:
Area code/Phone number _	(757.721-2417		this was done byphone (757)	437-6159
25-			emailfax (757)4	137-4933
SPECIES: (check one)	STRANDING LOCATION:			
CM = Green	State	Cau	160 5	
DC = Leatherback	Descriptive location the specific =		My // Sancia	<del></del>
Ei = Hawksbill		<u> </u>	MI VOI JA OF INC	- South
LK = Kemp's naley				
Unidentified	Latitude	1 2	2011/06	
Check Unidentified if not			ngitude	
positive. Do Not Guess.	CONDITION			
	CONDITION: (check one)	FINAL	_ DISPOSITION: (check one)	
Photos taken? Tyes ZNo	i = Fresh dead		Left on beach where found; bainted?	二Yes* 三No(5)
Species verified by state	2 = Moderately decomposed	~~ <del>~</del>	Buried: on begon / lift beach	
opprofinator? Tyes ZNo	i <u> </u>	. — 3 = .	carcass painted before buried?	s* No
SE代 (check one)	= 4 = Dried cardass		COL Proces	# CO40 F
Zimmature, undetermined	5 = Skeleton, bones only	- <del> </del>	Salvaged,all :, pantsiwnau w	
remale Male	7.00	$\leq$ 4 = $\stackrel{\cdot}{=}$	Pulled up on beach/dune, painted? Z	Yes* ∐No
Tow was sex determined?	TAGS: Contact state coordinator before	-0 - 1 7 = 2	Alive, teleased Alive, taken to renab, facility, where?	
= Necropsy	disposing of any tagged animal!!	1 1		
Tail length (adult only)	Flipper tags present? Yes No Check all 4 flippers. If found, record tag	8 = L	.eft floating, not recovered: painted? [	Yes* No
agth of tail beyond	number(s) / tag location / return address	9 = 5	Disposition unknown, explain	
carabacecm / in				
450		- paint	ted, what color?	<u> </u>
Nuchai NGTCH		CARA	PACE MEASUREMENTS: (see	a dearries as
	PIT tag scan? ☐ Yes ☑ No	Usina	calipers	
11 V	if found, record number / tag location		t length (NGTCH-TIP)	Circle unit
		Minimu	m length (NOTCH-NOTCH)	cm / ln
	Codes wire tag scan? Yes No		width (Widest Point)	cm in
13/2 ) 13/2 )	If positive response, record location (flipper)	Using	non-metal measuring tape	Circle unit
15 / 7 / 15/15/C	V1		length NCTCH-TIP)	2.5 cm²/ in
	Checked for living tag? Tyes No		milength MCTOH-NCTOH) <u>vz</u>	75 tm// n
	If found, record location (scute number 3 side)	: Curved	width (Widest Point) $=$ $\sqrt{C}$	4 4 sm/ in
Remor Posterior				Circle anit
NOTCH		Weight	actualest	
The first of	Man			
Infilmy ING GIVE	Mark wounds / abnormalities on diagram	ns at left a	and describe below (note tarior).	oii, dear
	The second children lie it, brobeller damad	ie epibloi	a. papillomas, emaciation, etc.,	Please
	mote if no wouldes / abnormalities are	found.		}
	- Salously Wanted	Maar	drun from 12	23/
		1/ // //	17 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
		Jana (	ITA CHE CIP.	<u></u>
	- load like almost	2011 5	ON CHARTE	-
7 ~ 4	1 - all V	^		
1 109 1	beth trout fi	MODON	s taken for san	MR2/104
		1		<del>\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ </del>

OBSERVERIS MALE		TIME THE OTT
OBSERVER'S NAME / ADD	DRESS / PHONE:	STRANDING DATE:
FILST [ WISTOCK	M.I. S Last Negor	Year 20 U Month Mc Day D
miliation		Turtle number by day UZ
dress	Back Bay National Wildlife Refuge	Traile hamber by day W [S]
Plum	a Tree Island National Wildlife Refuge	Field #:
Area code/Phone number		State coordinator must be notified within 48 hrs:
- 194 codest flotte fluttibes -	Virginia Beach, VA 23456 (757) 721	this was done byphone (757)437-6159
		emailfax (757)437-4933
SPECIES: (check one)	STRANDING, LOCATION:	
CC = Loggerhead		63
CM = Green	State	County / County
□ DC = Leatherback	Descriptive location (be specific)	County N SEATON
☐ El = Hawksbill	remorn raver	
LK = Kemp's ndley		
UN = Unidentified	Latituge	Language
Check Unidentified if not		Longitude
positive. Do Not Guess.		
	CONDITION: (check one)	FINAL DISPOSITION: (check one)
Photos taken? ∑Yes Zhio	:	1 = Left on beach where found, painted 1 Tyes* Thors
Species verified by state.	1 = Fresh dead	1 2 = Buried: on beach off beach
ocordinator?Yes :∑No	2 = Moderately decomposed	✓ carcass painted before burieu? To Zast To No.
	∠ 3 = Severely decomposed	L∠D = Salvaged: all (≥ partis), what why?
SEX: (check one)	4 = Oried carcass	- Lit Horan - Samo
mmature, undetermined	5 = Skeleton, bones only	
Female Male		
-ow was sex determined?	TAGS: Contact state coordinator before	6 = Alive, released
Necropsy	disposing of any tagged animal!!	7 = Alive, taken to rehab, facility, where?
= Tail length (adult only)	Filoper tags present? Yes No	8 = Left floating, not recovered: painted? Yes* No
agth of tail beyond	Check all 4 flippers. If found, record tag	9 = Disposition unknown, explain
•	number(s) / tag location / return address	Bisbosideri arikitowii. Sxprairi
carabacecm/n		*If painted, what color?
1 MINICAL IN		
Nuchar		CARAPACE MEASUREMENTS: (see drawing)
CM CAUS NOTCH	PIT tag scan? ☐ Yes ☑ No	111 .
44	If found, record number / tag location	Si die dine
		Straight length (NOTCH-TIP)
		Ctroight width Miliage Daniel
	. Coded wire tag scan? Tyes 7 No	
	if positive response, record location (flipper)	Using non-metal measuring tape Circle unit
	Charles ( )	Curved length (NOTCH-TIF) 55.7 cm in
TOTAL TOTAL	Checked for living tag? ☐Yes ☑ No	Minimum length (NOTCH-NCTCH) 3/1/5/2 cm in
	flound, record location (soute number & side)	Curved width (Widest Point)
6.53 EUR ( 1974 ) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		Circle anit
rg.net TIP   Posterior - Kill		Weight     actual     est.
	Mark wounds / abnormalities on diagrams	s at left and describe below (note tar or on, gear
in Sing	or debris entanglement, propeller damage	e, epiblota, papillomas, emaciation, etc.). Please
	note if no wounds / abnormalities are i	e, epiblota, papiliomas, emaciation, etc.). Please
		found.
	- Mark Julles derce	microsof. 4/611/1 process
		TO THE PARTY OF TH
	- COMMETTEE & COMM	person to some - Cronzed
DA CHE	- In out in outer	now + cosperior of mount
- Juny	100	
$A \cap \emptyset$ , $A \cap \emptyset$	- JONG STICK OUT	of 30 minesod neck, D
I MORA !	sciles missana 1	from there is head + cavatre
(43)~~	アイノ (13,21)	-Van (1)
		TRUM FOUR Samone

CLA TURILE SI	RANDING AND SALVAGE N	<u> ETWORK – STRANDING REPORT</u>
CESERVER'S NAME / AD	DRESS / PHONE:	STRANDING DATE: Year 2000 Month DEDay
Accress 4005 Sandpipe	ional Wildlife Refuge er Rd., VA Beach, VA 23456	Turtle number by day ②包 Field #:
Area code/Phone number		State coordinator must be notified within 48 nrs: this was done bypnone (757)437-6159
SPECIES: (check one)		emailfax (757)407-4933
= UO = Loggernead	STRANDING LOCATION:	Sounty VA Beach
CO = Leatherback  Hawkspill  L4 = Kemp's ngley	Descriptive location (be specific)	it we control of NC corre
She Shidentified Sheak Unidentified if not	Lautuge	_orgaude
positive. Do Not Guess.	CONDITION: (cneck one)	FINAL DISPOSITION: (check one)
Photos taxen? Tyes Zivo Species verified by ctate	= 4 5 -AVE	
corplinator? Yes No	= 2 = Moderatery decomposed 2 = 3 = 3 everety decomposed	To a served the served modern control of the served to served the served to the served
SEX. (check one) mmature, undetermined	= 1 = Oned parcass = 5 = Skaleton, panes pnly	- VIII SIMIN
	TAGS: Contact state coordinator before disposing of any tagged animal!!	4 = Prined up on Jeasth/gune, painteen KestNo 6 = Alive, released 7 = Alive, taken to renab, facility_where?
Taillength (adult only) Length of tail beyond Darabadeom / n	Filipper tags present? Yes No Check all 4 flippers. If found, record tag number(s) / tag location / return address	8 = Left floating, not resovered; Jainted?Yes*No 9 = Disposition unknown, explain
a Alleran		"If painted, what color?
Nucrail Notal	PIT tag coan? Tyes No Found, record number / tag location	CARAPACE MEASUREMENTS: (see drawing) Using calipers Circle unit Straight ength 1/070H-179
	Coded wire tag scan?	Straight width Widest Point: om in Using non-metal measuring tape   Circle unit   Curved length 14070H=19   Common of the common of t
	Checked for lying tag? Thes Thought found, record location (soute number 2 side)	Minimum length (1/070H-1/070H) F75 (am) in Surved width (1/10H2) Fam (am) in Sirate write
Posterior NOTCH		Weight satus setkg _c
Al gane	Mark wounds apportmatities on diagrams or depris entanglement, proceiler damage note if no wounds / abnormalities are for the form of the	e, eclorota, cacillomas, emacration, etc Please
The state of the s	Colley VINE of the	An James

audii Back Bay Vari	M.I. Stast WCKCV	STRANDING DATE: Year 2000 Month 空戶Day 图1	
Audress 4005 Sandpipe	r Rd., 7A Beach, VA 23456	Turtle number by day 773	
Area code/Phone number		State coordinator must be notified within 48 , this was done byphone (757)437-6159emailfax (757)437-4933	irs;
SPECIES: (check one)	STEANGING		
∠ UC = Loggernead	STRANDING LOCATION: State _ 1/13	160 - 1	
CM = Green	_	County VA Freh	
DO = Leatherback El = Hawkspill	Descriptive location (be specific)	27 mi south of EISIC	
= -	norther berter		
U`\ = UCIGenafied	2000		
Sheck Unidentified if not	Latitude	Longitude	
zasitive. Do Not Guess.			
	GCNDITION: (check one)	FINAL DISPOSITION: (check one)	
Guordo raxesto III √es III (	J = 48Ve	The field on casen upgrates on a service to the	, s
cestles ventiled by state	= 1 = Fresh dead	Z = Buned: In beach of mains	, ,
opraunator¹ = /es ≥/lo	2 = Moderately decomposed 3 = Severely decomposed	pareasa painted before Judies (Time)	
SEV	= 4 = Oned pardass	consess painted before June 1   recr   no   Zoams   whee why   Coams   whee why   Coams   Co	
SEX check one:	5 = Skeleton, bones only	The same	
mmature, undetermined Female T Male		$A = 2 \min\{aa : a > a > a = a = a > a > a = a = a = a =$	
TOW Was sex determined?	TAGS: Contact state coordinator before	5 ₹ Alive, released	
	uisposina of any tagged animalit	7 = Alive, taken to renap, facility   where?	
Tail ength facult only	Finder tags present? Yes : / No	8 = Left floating, not recovered: painted?Yes*N	
-augur of fall beyong	SiteCX all 4 theoers. If found, record tag	= 5 = 25 Chooking hot issorticed, painted / res r.	ıÇ
caradadecm_c	number(s) tag location / return address		
<i>₽</i>		"If painted, what solor?	_
Yugnai		CAPADACE MEASUREMENTS (	
	PiTitag coan?Yes No	CARAPACE MEASUREMENTS: (see drawing Using calipers Circle using calipers	
To y	flound, resord number / tag location	"Straight fonath MOTOW TIDN	
		- Minimum length INGTOH-INGTOH	:0
	Codes three too codes T. M. T.	Straight width Widest Point,	-
	Social wire tag scan? Yes No foositive resconse, record location (flipper)	Using non-metal measuring tape Circle un	
1 2 miles		Curved length MCTCH-TP 757 Zmu	
WING WING TO	Checkes for using tag? Tyes No	Minimum length NOTSHANSTON 7	_
	) found, record location (soute number & side)	Surved width Wildest Fornt:	
		Circle yout	
Posterior NOTOR		- Weight 📃 scrup. 📃 est	: )
GEOMETRIA -			
- Existis =	Mark wounds aphormalities on diagrams	s at left and decorde below (note tar or deligear	
~ wissura	or secre entanglement, propeller damage	e, epiblicia, papilicimas, emaciation, etc. — Please	
199	note if no wounds / abnormalities are f	ound	
	- Jeg Mercusaino	2 , Seletes missing trom	
	METO COURT TIPPENT	of feare viscouring derromagness	
	Value		
	TO VOINE	10#+ Front Flipper	-
AND S	TIKEN.		į
Mesh			İ
			į

CESERVER'S MAME / AR	THE CALVACET	IETWORK - STRANDING REPORT
CESERVER'S NAME / ADI	DRESS / PHONE: L	STRANDING DATE:
ilation Back has Ye	M.I. S Last Wicker	Year 2010년 Month 교트Day(국민
accress 4005 Sand-	ional Wildlife Refuge	Turtle number by day 77
radiess oob sandpipe	er Rd., VA Beach, VA 23456	Field #
		State coordinator must be notified within 48 ars.
Area code/Phone number _	(757) 721-2412	this was done byphone -757\437-6159
SPECIES: (check one)	STRANDING LOCATION:	
∠ UU = Loggerhean	State 1	
CM = Green		_ County VA RECTURY
DC = Leatherback El = Hawksbill	Descriptive location (be specific)	I mile south of ISISVILK
UA = Kemo s ndley	Vaint	
= 0.1 Action andley		
Check Unidentified if not	Latitude	Langwade
iositive. Do Not Guess.		
	CONDITION: (check one)	FINAL DISPOSITION: (check one)
notes taken? Tyes Zivo	0 = -Nve	
cleditationsresno	· =	1 Set on yearsh where purity takined rest
Cordinators resho	= 1 = Moderately Jecomposed	/ par page painted before pur en. To your Total
	en or hereier recommodaes	- Zi = Sayaren I di Zinoo ooku waki waki i
SEX: (check one)	4 = Oned parcess	Wind Samuel S
	5 = Skeleton pones priv	- MMS samples
== Female == Male		4 = Puiled up on Deach/dune, paidted? Zires*1.0 6 = Alive, released
TOW Was sax determinant	TAGS: Contact state coordinator before	
`\ecropsy	disposing of any tadded animal!!	
Tail length laduit only	Filoder tags present? Tiles Zino	8 = Left floating, not recovered: painted?res*No
-ength of tail beyond	Check all 4 flippers. If found, record tag	9 = Disposition unknown, explain
Caradadecm in	number(s) / tag location / return address	
12xx2		"If painted, what color? Circles
Nuchai NCTSH		
NO TO NOTOH	PiT tag scan? Yes No	CARAPACE MEASUREMENTS: (see drawing)
	If found, record number litary location	Using calipers Circle unit
		Straight ength MCTGH-TP1 am in
7		Minimum length NGTSH-NGTSHsm _n
1-28	Coded wire tag span? Yes Mo	Straight width Widest Pointom a
1 - 42	facsitive response, record location (flipper)	Using non-metal measuring tape Circle unit
		- Curved length 1/270H-TP <u>アム</u> 島 (shi <sup>ll)</sup> shi
Con Con State of State of	Citedhed for lying tag? Yes No	- Minimum length NOTO=NOTO= <u>- 프로그</u> 브 승규 (a)
wont	figung, record location (soute number & side)	Surved wath 10 sept Point 1992 (Significance)
370		
Specifical Specification (NCTCH)		Weight ☐ sotuc ☐ est
<i>i</i> , , ,	Mark wounds approximations on diagrams	e ar left and apparent allow have the same
	or seons entanglement, proceiler damage	
	note if no wounds / abnormalities are	a. epidiota, dadiúdmas lemadiation leto Please •
	abilities are	ound.
	- Started tack they can	weget to being this
	7/2-12	N S S S S S S S S S S S S S S S S S S S
	- Charles Alant	what Litter - xighten at
	- to Course sitt on	extex misting from Armie
1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 /	Y	301 7 712 113
12 4	- Dove gresent of	LYIX & HOUT HIDDEN.
NTRO 1	lott from VI	ipper taken
v) ~	1,00-1	77

OBSERVERIO	THAIDING AND SALVAGE	NETWORK - STRANDING REPOR
First My Stove Pov	DURESS / PHONE:  M.I. Last Wicker	STRANDING DATE: Year 2000 Month 250 Day 31
dress 4005 Sandpi	cional Wildlife Refuge per Rd., VA Beach, VA 23456	Turtle number by day
Area code/Phone number		State coordinator must be notified within 12 bro
SPECIES: (check one)		this was done byphone (757)437-6159 emailfax (757)437-4933
CO = Loggerhead CM = Green DC = Leatherback	STRANDING LOCATION: State Descriptive location (be specific)	County_ VA Beach
El = Hawksbill LK = Kemp's naley UN = Unidentified	- Vab vuile south	of BBUILLE portion barder
Check Unidentified if not positive. Do Not Guess.	Latitude	Longitude
Photos taken? Tyes ZNo Species venified by state operatinator? Yes ZNo	CONDITION: (check one)  0 = Alive 1 = Fresh dead 2 = Moderately decomposed 3 = Severely decomposed	FINAL DISPOSITION: (check one)  1 = Left on beach where found: painted? res* No(5)  2 = Buried: on beach / off beach, carcass painted before burieu? /es* No
SEX: (check one)	4 = Dried carcass 5 = Skeleton, bones only	partis, what why?
Female Male  Tow was sex determined?  Necropsy  Tail length (adult only)  Jogth of tail beyond  carabasecm / in	TAGS: Contact state coordinator before disposing of any tagged animal!! Filipper tags present? Yes No Check all 4 flippers. If found, record tag number(s) / tag location / return address	- Tuiled up on beach/dune painted Zy
Nuchal Nuchal		"If painted, what color? _OV EVICE
NOTCH NOTCH	PIT tag scan? Yes No If found, record number / tag location	CARAPACE MEASUREMENTS: (see drawing) Using calipers Straight length (NOTCH-TIP)  Minimum length (NOTCH-TIP)  Cm / in
332	Coded wire tag scan? Yes No If positive response, record location (flipper)	Minimum length (NOTCH-NOTCH) cm /in Straight width (Widest Point) cm /in Using non-metal measuring tape Circle-unit Curved length (NOTCH-TIP)
ariur Pasiario	Checked for living tag? Yes No found, record location (scute number & side)	Minimum length (NOTCH-NOTCH) 65.2cm/in Curved width (Widest Point) 65.2cm/in Gircle with
Postenor NOTOH		vveignt actual estkg lb
	Mark wounds / abnormalities on diagrams or seems entanglement, propeller damage note if no wounds / abnormalities are for the composition and the composition	thing there in the form
the sint L	1 Marie 1	Sample taken

CECEDVE	TO THE ING AND SALVAGE	NETWORK - STRANDING REPOR
First Mani 4 Despendent First Mani 4 Despendent Filation Back Bay National Larges 4005 Sandpip	DDRESS / PHONE: M.I Last	STRANDING DATE: Year 2000 Month De Dayl Turtle number by day ON Field #:
Frea code/Phone number	(757) 721-2412	State coordinator must be notified within 48 hrs
SPECIES: (check one)  CO = Loggerhead  CM = Green  CC = Leatherback  EI = Hawksbill  LK = Kemp s ndley  JN = Unidentified  Check Unidentified if not	STRANDING LOCATION: State  State  State  Latitude	County for Same County for Sam
csitive. Do Not Guess.  Totos taken? Yes No secies verified by state orainator? Yes No	CONDITION: (check one)  3 = Alive = Fresh dead 2 = Moderately decomposed 3 = Severely decomposed	FINAL DISPOSITION: (check one)  1 = Left on beach where found, painted
EEX: (check one) mmature, undeterminedFemaleMale rew was sex determined?NecropsyTail length (adult only) angth of tail beyond arabadecm / in	TAGS: Contact state coordinator before disposing of any tagged animal!!  Filipper tags present? Yes No Check all 4 flippers. If found, record tag number(s) / tag location / return address	4 = Pulled up on beach dune dainted
Nuchal NOTCH	PIT tag scan? Yes No If found, record number / tag location  Coded wire tag scan? Yes No If positive response, record location (flipper)  Checked for living tag? Yes No If found, record location (scute number & side)	CARAPACE MEASUREMENTS: (see drawing) Using calipers Straight length (NOTCH-TIF) Minimum length NOTCH-TICTCH) Straight width Widest Point) Using non-metal measuring tape Curved length (NOTCH-TIF) Minimum length NOTCH-TIF) Minimum length NOTCH-NOTCH) Curved width (Widest Point) Circle dnick  Circle dnick  Circle dnick
NOTCH	Marx wounds abnormalities on diagrams or debris entanglement, propeller damage note if no wounds abnormalities are for the second of the secon	at left and describe below indre far or all gear pediblota, papillomas, emaciation, etc Please ound.
1 RG 1 .		

# **APPENDIX 2**

SEA TURTLE NEST RELOCATION DATA SHEETS

# DATA SHEET FOR CRAWLS & NEST RELOCATIONS

I. General Information (weather, time, tide leve	el, wind speed, location,etc.)
Date July 11, 2000 Tide height falling Estin	nated air temperature 73° F
General weather conditions (ie. % cloud cover, rain	orally 2001, Cloud forces
will speed & direction + (NE) Location of cray	VI (~ include markers) 7 /-
milis south of Back Bau Nour be	each camp
II. Parties Involved  Lamar Gore, Sara Williams, And Farrell, Eric Duran, Brahid Teu	rew Camponiizz: Micheel Christine
J	
III. Data to be collected for Each Set of Tracks	Finie Bowden called Lamow Gare at 10:30 pm, Reported turtle crawing of neach (Turned of heachights
Grawl # de. 1.2.3 Time crawl detected	neach provide the neachigains
Track measurements: from where first visible near	Surf to nest size or end orderaville
Length of incoming tracks (m) AQ, The fenorth	of ourgoing tracks (m) 14.88
Width of incoming tracks cm 90 Width	of outgoing tracks $(cm) = 90$
Flipper impressions alternate or opposite <u>Ult.</u> w	Vere tracks prominent? <u>UES</u>
Distance from center of disturbed nesting area to toe	ordunes 7.55 m
Topographical feature at end of tracks (CIRCLE are: Was a nest found? <u>UES</u> false nest?	a on diagram)
false nest?	faise crawi only?
1-forebeach,2-backbeach,3-embryonic dunes,4-bas of 1st foredune,7-downslope of 1st foredune,8-fore	3 3 3 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3
IV. Data to be collected for Each Nest (measuren	nents of nest, egg #. etc.)
Original Nest Data:	NEST CAVITY
Nest ∓ (le. 1, 2, 3, )   Crawi≓	TEST CAVIII
time nest excavated 13:30 am	
width of disturbed nesting area 2.16 m	SUFF ACE
Length of disturced nesting area 2,5 m	too nest depth/ 19 tm
Nest cavity width at widest pt. 19 'F cm	100 110
Nest cavity length at longest pt. 22 cm	
* Total = eggs 115  #damaged eggs a (see note below)	anttam nest 48.3m
= broken or predated eggs 1 (See note belt Temperature of soil in nest cavity - NA-	
* Total # eggs :- 2 eggs were fused tog	ether and slightly torn at point of
comments. fushion. Fused eggs a	sningued to teak upon (enloyal and
long elliptical, were not reducted	with viest to reduce chance of invasion
prior egglike by ants or batteria	ether and sugntly torn at point of sninued to tear upon removal and with nest to reduce chance of invasion. Two fused eggs were counted as two
individual eggs.	while concening for nest in body.
had dimple and - 1 egg was broken of shall-appeared on Dir. Body pit was	while searching for nest in body marked with Hags but nest was on edge

#### Back Bay National Wildlife Refuge

Nest Analysis for Nest 1, Law July 11, 2000 -- December 13, 2000 Inspected by: John Gallegos and Sara Williams

(Eggs frozen in freezer until inspection. )

#### Unhatched egg analysis:

- Developed Embryos = 28 (of varying degrees of development)
- Addled eggs = 15

Summary of Hatching for Nest laid on July 11, 2000 Nest hatched September 24-October 5, 2000

<u>Date</u>	# Live Hatchlings	# Dead Hatchlings
09/24/00	22*	0
09/25/00	2	0
09/26/00	1	. 0
09/27/00	1	0
10/04/00	16	2
10/05/00*	* 14	15

 $<sup>\</sup>star$  4 Hatchlings given to the Virginia Marine Science Museum for the Headstart Program

 $<sup>^{\</sup>star\star}$  Nest excavated. A total of 38 eggs were removed and analyzed on December 13, 2000.

# DATA SHEET FOR CRAWLS & NEST RELOCATIONS

I. General Information (weather, time, tide level,	wind speed. location.etc.)  ly carrie up 2 hours after July 15th 7:54fre  uted air temperature 76°F  Thigh tide
Date list is a small of turtle probab	is lawle up a nours affect July 13 high tide
Date July 16, 2000 Tide height falling Estima	ited air temperature 86°F
General weather conditions (ie. % cloud sover, raining Wind speed & Windspeed	III) 50°10 CIOCI COVEN
Wind speed & direction Location of crawl	(~. include markers) 150 n
North of Fake Cape State Park/ N	10th Carolina border
II. Parties Involved	
Lamar Giore, Sara Williams, Andrew (	anifonutzi, Eric Luraii,
- Cardyce Fockler,	
III. Data to be collected for Each Set of Tracks	Park Flund Crawl at 11 ZC pmd 11/20
o foratvi = de 1000 o como	10116 Die Til II amon Laviaci Comme
Track measurements: (from where first visible near st	TO 15 am Date July 16, 2000 Refuse Confuser in to nest site or end of crawls of outgoing tracks (m) 24.7  Foutgoing tracks om: 42 m goal measurement what incarrate in the confuser in the confuser of dunes 0
Langth of incoming tracks (m) 10 1 Sangth of	of ourgoing process (m) 24 7
Width of incoming tracks from . <b>35</b> And Width of	Fourgoing tracks am: 41. 3 April Mcasulential
Sow Char	0/200 1/2×62×64: 10
Flipper impressions alternate or opposite alt We	ere tracks prominent 1100 ( A House of CO)
Distance from center of disturbed nesting area to toe of	of dunes O
Topographical feature at end of tracks (CIRCLE area	on diagram)
Was a nest found? (1) faise nest? Mo	on diagram)  Shipe orang only 1905
Was a nest found? NO faise nest? NO	iaise order only.
70.17( -	around positi
ئر 🛦	
porm 3	
-forebeach, 2-cackbeach, 3-embryonic dunes, 4-base	ent toregunes 5-upsione of 1st foregune 6-top
of 1st foregune.7-downstope of 1st foregune,β-foreg	iune depression,9-upsiope of Indifferedune
IV. Data to be collected for Each Nest (measurem	ents of nest legg ≅ letc )
To Dack Look (Measurem	on some of the contract of the
Original Nest Data:	NEST CAVITY
Nest ≠ (ie. 1, 2, 3,) Crawi#	TIEST CHAILT
Time nest excavated	
Width of disturbed nesting area 1.75 m	SUFFACE
Length of disturbed assing area 1.74 m	
Nest cavity width at widest pt.	1 top nest depth <u>/ tin</u>
Nest cavity length at longest pt.	
Total = eggs	
÷damaged eggs	pottom nest 20
= broken or predered	depth dest
= broken at predated eggs	
surbound of action west advited	

# **APPENDIX 3**

# VMSM STRANDING TEAM 1999-2000 HATCHLING REPORT



To:

John Stasko, John Gallegos and Sara Williams

Back Bay National Wildlife Refuge

Subject:

Report on 1999-2000 sea turtle hatchlings at VMSM

Hello everyone. I have attached a report on the 1999-2000 sea turtle hatchlings for your records. The report summarizes the year in which these sea turtles were in the care of the museum. As you can see, it was a very successful year for the turtles and for the museum. We were able to continue our studies of the early growth and development of loggerhead sea turtles. This important information will eventually lead to a manuscript documenting results of several years of growth studies and the husbandry techniques developed to properly care for hatchling sea turtles. We are committed to advancing the husbandry of sea turtles in our care and sharing this information with other organizations involved in similar research, rescue and education activities related to sea turtles.

Equally important, these sea turtles have been part of a special educational experience for hundreds of thousands of people and tens of thousands of students. The value of seeing living animals as part of a learning experience is tremendous and we at the museum are able to see this on a daily basis through interactions with our many visitors. The continuing cooperation and participation of Back Bay National Wildlife Refuge with our sea turtle research and education programs and our stranding response efforts is very gratifying and rewarding. I am sure you feel the same way about these important cooperative efforts.

On behalf of myself, Beth Firchau (Curator in charge of sea turtle husbandry), Thomas Harder (Aquarist responsible for the sea turtle hatchlings), and the rest of our staff, thanks for your continued support and participation in these sea turtle programs. Have a great holiday season.

Sincerely.

W. Mark Swingle

Curator of Stranding Program & Acquisitions

### VIRGINIA MARINE SCIENCE MUSEUM REPORT TO BACK BAY NATIONAL WILDLIFE REFUGE 1999-2000 LOGGERHEAD SEA TURTLE HATCHLINGS

prepared by W. Mark Swingle, Curator December 20, 2000

#### Arrival:

Four loggerhead hatchlings were received by the Virginia Marine Science Museum (VMSM) from Nest #1 on Back Bay National Wildlife Refuge (BBNWR) on August 26, 1999. The hatchlings were in excellent health and were examined by museum veterinarian, Dr. Robert George, on September 9, 1999. At this time, all hatchlings were eating well and gaining weight.

#### Year at VMSM:

During the course of the next year, the hatchlings were reared in a specially designed holding system on exhibit at the VMSM. Water quality is maintained by a life support system which delivers continuous circulation of natural seawater at a temperature of 24.5° C and a salinity of 30 ppt (parts per thousand). The exhibit is designed to inform visitors about the life history and ecology of Virginia's sea turtles and to show the early development of loggerhead sea turtles. Visitors can observe the care and feeding of the young sea turtles and also the weekly measurements of their growth by the animal care staff. The progress of their growth is displayed during the year as part of the exhibit. The museum welcomed more than 600,000 visitors, including more than 70,000 students, during the year in which these young sea turtles were in our care.

While in the care of the museum, the sea turtles were fed daily and their growth was measured on a weekly basis. The growth and development of the individual turtles was determined by measuring their weight (recorded in grams), their carapace length from nuchal notch to posterior notch (recorded in centimeters and abbreviated as CL N-N), and their carapace width at the widest point (recorded in centimeters and abbreviated as CW). In addition, the mass of food consumed by each individual turtle was also recorded as part of the museum's ongoing efforts to study and advance the husbandry of sea turtles. Summaries of the growth and development of these young loggerheads are reported in the attached tables for your reference.

#### Release:

As the time approached for their release, the individual turtles were tagged with subcutaneous pit tags. The following pit tag numbers are associated with each turtle.

<u>Turtle Number</u>	<u>Pit Tag Number</u>
#2	414D211507
#3	414D235434
#4	414D2F6006
#5	414D106813

In addition, a blood sample was obtained from each individual turtle for routine screening by Dr. George prior to release. Th results of the blood tests are also included as attachments for your reference.

The release of the turtles was coordinated with the U.S. Coast Guard (USCG). Museum staff member, Brian Russell, accompanied the turtles. The release was conducted from the USCG Cutter Albacore under the command of Captain Peter Niles on 11-09-2000. Details of the release were as follows:

Location:

36 22.5N

74 25.3W

Time:

0100

Salinity:

34 ppt (parts per thousand)

Water temp:

the thermometer on the ship was not believed to be

accurate, however the captain verified the location as warm

waters of the Gulf Stream

## VIRGINIA MARINE SCIENCE MUSEUM BBNWR LOGGERHEAD NUMBER 2 GROWTH RECORD

DATE	WT. (gm)	CL N-N (cm)	CW (cm)	FOOD WT. (gm)	FOOD	COMMENTS
09/10/99	34.3	5.01	4.18	~20pcs	scallops	COMMENTS
10/08/99	90	8.27	6.77	~40pcs	shrimp	
11/12/99	188	9.9	8.5	9.61g		
12/10/99	293	11.8	9.8	13q	gel	
01/12/00	473	13.2	11.0	16g	gel	
02/09/00	618	14.7	12.7	18g	gel	
03/08/00	893	16.9	14.3	——————————————————————————————————————	gel	
04/12/00	1177	18.6	15.9	24g	gel	
05/10/00	1457	20.2	17.2	32g	gel	
06/07/00	1610	21.4	18.2	28g	gel	
07/12/00	1925	22.6		15g	gel	
08/09/00	2125	23.6	19.1	23g	gel	
09/13/00	2319		19.9	26g	gel	
10/11/00	2839	24.6	20.9	31g	squid	fed various foods in this month
		25.6	21.7	55g	smelt	fed various foods in this month
11/01/00	3125	26.6	22.6	56g	crab	

## VIRGINIA MARINE SCIENCE MUSEUM BBNWR LOGGERHEAD NUMBER 3 GROWTH RECORD

DATE	WT. (gm)	CL N-N (cm)	CW (cm)	FOOD WT. (gm)	FOOD	COMMENTS
09/10/99		5.01	4.18	~20pcs	scallops	The second secon
10/08/99	102	8.75	7.23	~40pcs	shrimp	
11/12/99	212	10.6	9.3	10.73g	gel	
12/10/99	337	12.6	10.6	15g	gel	
01/12/00	564	14.1	12.0	18g	gel	
02/09/00	704	15.4	13.5	20g	gel	
03/08/00	1017	17.7	15.1	28q	gel	
04/12/00	1351	19.6	16.9	37g	gel	
05/10/00	1641	21.6	18.1	33g	gel	
06/07/00	1847	22.7	19.2	19g	gel	
07/12/00	2221	24.0	20.3	33g	gel	
08/09/00	2528	25.1	21.1	31g	gel	
09/13/00	2890	26.4	22.2	37g	squid	fed various foods in this month
10/11/00	3359	27.4	23.0	64g	smelt	fed various foods in this month
11/01/00	3785	28.6	24.0	67g	crab	The state of the s

## VIRGINIA MARINE SCIENCE MUSEUM BBNWR LOGGERHEAD NUMBER 4 GROWTH RECORD

DATE	WT. (gm)	CL N-N (cm)	CW (cm)	FOOD WT. (gm)	FOOD	COMMENTS
09/10/99	33	5.01	3.97	~20pcs	scallops	4
10/08/99	88	8.35	7.03	~40pcs	shrimp	
11/12/99	205	10.1	9.1	10.32g	gel	
12/10/99	324	12.1	10.5	15g	gel	
01/12/00	573	14.1	11.8	18g	gel	
02/09/00	759	15.5	13.7	20g	gel	-
03/08/00	992	17.9	15.1	28g	gel	
04/12/00	1281	. 19.5	16.6	37g	gel	
05/10/00	1591	20.9	17.8	31g	gel	
06/07/00	1673	22.3	18.5	17g	gel	
07/12/00	2085	23.6	20.1	26g	gel	
08/09/00	2340	24.8	20.9	28g	gel	
09/13/00	2664	26.1	21.8	35g	squid	fed various foods in this month
10/11/00	3123	27.1	22.7	60.5q	smelt	fed various foods in this month
11/01/00	3589	28.2	23.5	62g	crab	

## VIRGINIA MARINE SCIENCE MUSEUM BBNWR LOGGERHEAD NUMBER 5 GROWTH RECORD

DATE	WT. (gm)	CL N-N (cm)	CW (cm)	FOOD WT. (gm)	FOOD	COMMENTS
09/10/99		5.22	4.18	~20pcs	scallops	
10/08/99		8.95	7.44	~40pcs	shrimp	
11/12/99	251	11.1	10.0	12.67g	gel	
12/10/99	401	13.2	11.5	19g	gel	
01/12/00	699	15.4	13.2	24g	gel	
02/09/00	916	16.8	14.7	13g	gel	
03/08/00	1282	19.3	16.3	36g	gel	
04/12/00	1662	21.3	17.8	46g	gel	
05/10/00	2033	23.0	19.1	40g	gel	
06/07/00	2189	24.4	20.2	22g	gel	
07/12/00	2658	26.1	21.9	33g	gel	
08/09/00	3024	27.4	22.4	37g	gel	
09/13/00	3425	28.5	23.7	35g	squid	fed various foods in this month
10/11/00	3921	29.4	24.7	67g	smelt	fed various foods in this month
11/01/00	4206	29.9	25.5	68g	crab	ica various jouds ili tilis month



R. Lawrence Smith, M.D., Valerio M. Genta, M.D., Robert V. Frazier, Jr., M.D.

NAME: VMSM, SEATURTLE 02

LOC: VA MARINE SCI MUS, COLLECTIONS

PT #: 0420-1 yearling comphy: GEORGE, ROBERT DVM
DOB: 00000000 pre-selease SEX: U

			O11L	, , ,	_	
_	 	 				
			- 1000g			

DATE:	10/24/0	<b>0</b>		
TIME:	2001		HORMAL	STINU
SODIUM	160 *		: 33-145	MMOL/L
POTASSIUM CHLORIDE CO2 GLUCOSE	RC 4.8 126 H 28 139 H		3.3-5.1 96-108 72.0-29.0 70-105	MMOL/L MMOL/L MMOL/L
CREATININE BUN TOTAL PROTEIN	0.3 118 H 2.3 *		⊍-1.0 6-19	MG/DL MG/DL MG/DL
ALBUMIN	RC 0.8		6.0-8.0	G/DL G/DL
CALCIUM	RC 4.5 *		3.4-10.2	MG/DL
PHOSPHORUS CHOLESTEROL URIC ACID	RC 12.8 H 86 L 0.3 L		.6-4.5 10-200 2.3-8.3	MG/DL MG/DL MG/DL
BILIRUBIN, TOTAL	0.2		0.2-1.2	MG/DL
ALKALINE PHOSPHATASE	148 H		39-117	U/L
SGOT (AST)	144 H		u /	U/L
SGPT (ALT)	8		0- 10	U/L

---FOOTNOTES---

RESULTS CHECKED



R. Lawrence Smith, M.D., Valerio M. Genta, M.D., Robert A. Frazier, Jr., M.D.

NAME: VMSM, SEATURTLE 03

LOC: VA MARINE SCI MUS, COLLECTIONS

PT #: 0420-2

PHY: GEORGE, ROBERT DVM

DOB: 00000000

SEX: M

yearling cc pre-veleage

CHEMISTRY	Υ	
DATE: 10/24/00 TIME: 2002	NORMAL UN	IITS
SODIUM 158 * RC	133-145 MM	10L/L
POTASSIUM 4.5 CHLORIDE 122 H COZ 31 H GLUCOSE 150 H CREATININE 0.3 BUN 107 H TOTAL PROTEIN 2.3 * RC	96-108 MM 22.0-29.0 MM 70-105 MG U 1.0 MG	10L/L 10L/L 10L/L 1/DL 1/DL 1/DL
ALBUMIN 0.8 RC	G. C.	/DL
CALCIUM 4.5 * RC	8.4-10.2 MG	/DL
PHOSPHORUS 11.7 H CHOLESTEROL 122 L URIC ACID 0.3 L BILIRUBIN, TOTAL 0.2	1 1-200 MG 2.1-8.3 MG 0 -1.2 MG	/DL /DL /DL
ALKALINE PHOSPHATASE 222 H SGOT (AST) 140 H SGPT (ALT) + 6	.37 U	/L /L /L

---FOOTNOTES---

RESULTS CHECKED

END OF REPORT

VMSM, SEATURTLE 03 10/25/2000 03:21 PAGE 1

FINAL REPORT



R. Lawrence Smith, M.D., Valerio M. Genta, M.D., Robert A. Fragier, Jr., M.D.

NAME: VMSM, SEATURTLE 04

PT #: 0420-3

DOB: 00000000

yearling cc pue-releast LOC: VA MARINE SCI MUS, COLLECTIONS

PHY: GEORGE, ROBERT DVM

SEX: M

С	ч	F	М	١T	C	т	D	V
_	11	┖.	м	1	J	- 1	$\Gamma$	- 1

DATE: TIME:	10/24/00 2003	NOFFIAL	UNITS
SODIUM	155 H	133-145	MMOL/L
POTASSIUM	4.0	3.3-5.1	MMOL/L
CHLORIDE	121 H	(18일 : 108 - 108	MMOL/L
C02	28	22.0-29.0	MMOL/L
GLUCOSE	135 H	智·智·秦·雷)则 引用 (4) (4) (4) (5) (5) (7) (4) (5) (6) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	MG/DL
CREATININE	0.2	. 0-1.0	MG/DL
BUN	109 H	6-19	MG/DL
TOTAL PROTEIN	·2.1 *	6.9- <b>8.0</b>	G/DL
ALBUMIN	RC 0.8 RC		G/DL
CALCIUM	4.2 *	8. + 10.2	MG/DL
	RC		,
PHOSPHORUS	14.2 H	24.5	MG/DL
CHOLESTEROL	121 L	1 - ) - 200	MG/DL
URIC ACID	0.3 L	28.3	MG/DL
BILIRUBIN, TOTAL	0.1 L	01.2	MG/DL
ALKALINE PHOSPHATASE	211 H	117	U/L
SGOT (AST)	156 H	$\mathcal{F}$	U/L
SGPT (ALT)	7 7	40	U/L

---FOOTNOTES---

RC RESULTS CHECKED

END OF REPORT



R. Lawrence Smith, M.D., Valerio M. Genta, M.D., Robert A. Fragier, Jr., M.D.

NAME: VMSM, SEATURTLE 05

PT #: 0420-4 DOB: 00000000 LOC: VA MARINE SCI MUS, COLLECTIONS

PHY: GEORGE, ROBERT DVM

CHEMISTRY

SEX: M

DATE: TIME:	10/24 ′00 2009		NERMAL	UNITS
SODIUM	15! H	,	1-3-145	MMOL/L
POTASSIUM	4.1		3 3-5.1	
CHLORIDE	12; H		95-108	MMUL/L
C02			22.9-29.0	MMOL/L
GLUCOSE	27 130 H		70-105	MMOL/L
CREATININE	0.,			MG/DL
BUN	71 H		1 - [ ,1]	MG/OL
TOTAL PROTEIN	2.( *	•	9-19	MG/DL
	RC S		6 9 3.0	G/UL
ALBUMIN	0.0			(N. 18)
- 현실, 프로그램이 되자 그룹 - 이 - 이 - 이 - 이 - 이 - 이 - 이 - 이 - 이 -	R(			G/DL
CALCIUM	4. *			
	Re		8 4-10.2	MG/DL
PHOSPHORUS	14.E H			
CHOLESTEROL	and the second s		6-4.5	MG/DL
URIC ACID	121 L	[	1 0-200	MG/UL
BILIRUBIN, TOTAL	0 L		2 3-8.3	MG/DL
The second of th	0.1 L	전 1 1886 Han 교회 기업 보호 전	1 2-1.2	MG/DL

---FOOTNOTES---

RESULTS CHECKED

ALKALINE PHOSPHATASE

SGOT (AST)

SGPT (ALT)

END OF REPORT

9-117

0-37

0-40

U/L

U/L

U/L

13' H

12' 11

# APPENDIX 4

NMFS GILLNET FISHERIES CLOSURE ANNOUNCEMENT



# Southeast Fishery Bulletin

National Marine Fisheries Service • Southeast Regional Office • 9721 Executive Center Drive N., St. Petersburg, FL 33702

#### FOR INFORMATION CONTACT:

FOR IMMEDIATE RELEASE:

May 12, 2000 NR00-022

David Bernhart 727-570-5312, FAX 727-570-5517 http://caldera.sero.nmfs.gov

David.Bernhart@noaa.gov

NOAA Fisheries Issues Emergency Rule to Protect
Endangered and Threatened Sea Turtles along Eastern North Carolina and Virginia Coast

Large Mesh Gillnet Fishery Closed

NOAA Fisheries announces the closure of waters along the coasts of Virginia and eastern North Carolina and in the mouth of the Chesapeake Bay to fishing with gillnets with a mesh size 6 inches or larger. The closed area includes all Atlantic Ocean waters between Cape Hatteras and 38° N. (approximately the Virginia-Maryland border), west of 75° W. longitude, and the waters in lower Chesapeake Bay, east of the Hampton Roads bridgetunnel and south of a line drawn between Old Point Comfort and Cape Charles City. Fishermen have until 11:59 p.m. on May 13, 2000 to retrieve any gillnets with 6 inch mesh or greater that are already set. This closure is in effect through June 11, 2000.

An unprecedented number of dead sea turtles have washed ashore on the North Carolina Outer Banks in April and May. During two concentrated stranding events from April 14-17 and May 3-8, a total of 280 turtles have been found between the town of Ocracoke and Oregon Inlet. Almost all the turtles have been loggerheads, a threatened species. The tenyear average is only 219 loggerheads stranding in all of North Carolina in an entire year. Winds and currents helped bring the carcasses ashore in large numbers, but reports from fishermen indicate that many dead turtles are still at sea, so the actual extent of the turtle mortality offshore is much greater than the strandings would indicate.

Four of the loggerheads that stranded in May were entangled in gillnets with mesh sizes of 10 to 12 inches. NOAA Fisheries has determined that the most

likely source of this sea turtle mortality is large-mesh gillnetting for monkfish and possibly dogfish. Other possible causes, such as disease, toxic algae, trauma, or hook fisheries, are not consistent with the nature of the strandings. Satellite sea surface temperature information has allowed NOAA Fisheries to reconstruct the likely times and locations of the sea turtle mortality. Gillnetting for dogfish and monkfish have been the active fisheries in those times and places. These fisheries have long soak times, ranging from overnight to several days. Large-mesh gillnets are known to be highly effective at catching turtles and in fact were the gear of choice during the historical sea turtle fishery.

Sea turtles are now migrating northward along the North Carolina coast into Virginia waters and Chesapeake Bay as these waters are rapidly warming. The turtles will likely still be concentrated on their migratory routes over the next weeks, until they disperse over their foraging grounds, and they will continue to be vulnerable to coastal and offshore large-mesh gillnet fisheries. NOAA Fisheries is issuing this temporary closure to reduce any further mortality of threatened and endangered sea turtles from large-mesh gillnets, after the already recordsetting number of strandings.

# Back Bay National Wildlife Refuge

## 1970-2000 Sea Turtle Nest Information

eggs) were relocated from Cape Romain NWR, SC after 50 days incubation to BBNWR, VA (\*Loggerhead Eggs Transplant Project\*). The relocation project produced a total of 5,557 hatchlings which were released in the Atlantic Ocean at BBNWR

Key: BBNWR=Back Bay National Wildlife Refuge; FCSP≂False Cape State Park; SB=Sandbridge, Darn Neck, and Little Island City Park beaches; VB=Virginia Beach Resort Strip, Fort Story, and Croatan beaches

"Example: 0.5m N FCSP N border= 0.5 miles North of False Cape State Park's northern border
Incub ()=nest relocated indoors and monitored by () exc.=live hatclings found during excavation
N/A= Data not available ""Nest Success Rate=(#Eggs/#Hatchlings Emerged)\*100

Nest # (T indicates transmitter applied)	Date of Nest	Locality	Exact Location of Nest**(see key)	# Eggs	# Hatchlings Emerged from Nest	Nest Success Rate(%)***	Comments (not complete)	Top Nest Depth	Bottom Nest Depth	Hatch Date	Incubation Period (days)
1	20-Jun-70	BBNWR	BBNWR beach ramp	132	0	N/A		N/A	N/A	N/A	N/A
2	30-Jun-70	SB	3m N BBNWR N border	87		N/A		N/A	N/A	N/A	N/A
3	1971	VB	N/A	119	0	0		N/A	N/A	N/A	N/A
	1972*	Relocated to BBNWR	Cape Romain, NWR (9 nests)	837	709	84.71		N/A	N/A	N/A	N/A
	1973*	Relocated to B8NWR	Cape Romain, NWR (12 nests)	1298	963	74.19		N/A	N/A	N/A	N/A
	1974*	Relocated to BBNWR	Cape Romain, NWR (9 nests)	854	735	86.07		N/A	N/A	N/A	N/A
	1975*	Relocated to BBNWR	Cape Romain, NWR (10 nests)	1064	852	80.08		N/A	N/A	N/A	N/A
	1977*	Relocated to BBNWR	Cape Romain, NWR (9 nests)	972	743	76.44		N/A	N/A	N/A	N/A
	1978*	Relocated to BBNWR	Cape Romain, NWR (8 nests)	686	597	87.03		N/A	N/A	N/A	N/A
	1979*	Relocated to BBNWR	Cape Romain, NWR (15 nests)	1883	N/A	N/A		N/A	N/A	N/A	N/A
4	21-Jul-79	BBNWR	0.5m N FCSP N border	132	81	61.36		N/A	N/A	N/A	N/A
5	2-Aug-79	FCSP	1m S FCSP N border	147	116	78.91		N/A	N/A	08-Nov-79	82
6	25-Jul-80	SB	3m N BBNWR N border	104	90	86.54		N/A	N/A	29-Sep-80	65
7	26-Jul-82	BBNWR	N/A	111	77	69.37	Relocated to Norfolk Zoo	N/A	N/A	16-Oct-82	82
8	13-Jul-83	FCSP	2m S FCSP border	93	35	37.63		N/A	N/A	N/A	62
9	14-Jun-85	FCSP	N/A	93	82	88.17		N/A	N/A	1-Sep-85	79
10	15-Jun-85	FCSP	N/A	93	36	38.71		N/A	N/A	7-Sep-85	84
11	29-Jun-85	SB	N/A	114	111	97.37		N/A	N/A	2-Sep-89	65
12	5-Aug-85	FCSP	N/A	137	131	95.62		N/A	N/A	11-Oct-85	67
13	31-Jul-86	BBNWR	BBNWR ramp	117	105	89.74	Relocated to VIMS	N/A	N/A	16-Oct-86	72
14	26-Jun-87	BBNWR	2.3m S BBNWR ramp	117	111	94.87		N/A	N/A	26-Aug-87	92
15	29-Jun-87	FCSP	0.25m S FCSP N border	119	89	74.79		N/A	N/A	31-Aug-87	61
16	10-Jul-87	BBNWR	2.8m S BBNWR ramp	154	140	90.91		N/A	N/A	10-Sep-87	61
17	24-Jul-87	BBNWR	0.75m S BBNWR ramp	141	138	97.87		N/A	N/A	30-Sep-87	68
18	29-Jul-87	VB	10th Street	94	80 (14 esc)	85.11	Relocated to VIMS	N/A	N/A	3-Oct-87	64
19	6-Aug-87	BBNWR	0.3m S BBNWR ramp	139	129	92.81		N/A	N/A	17-Oct-93	72
20	5-Jun-89	N/A	N/A	128	0	0.00		N/A	N/A	N/A	N/A .
21	6-Jun-89	N/A	N/A	175	155	88.57		N/A	N/A	6-Aug-89	61
22	23-Jun-89	N/A	N/A	139	123	88.49		N/A	N/A	28-Aug-89	66
23	7-Jul-89	N/A	N/A	154	147	95.45		N/A	N/A	9-Sep-89	64
24	11-Jul-89	N/A	N/A	128	118	92.19		N/A	N/A	13-Sep-89	64
25	21-Jul-89	N/A	N/A	140	122	87.14		N/A	N/A	24-Sep-89	65
26	25-Jul-89	N/A	N/A	127	118	92.91		N/A	N/A	3-Oct-89	70
27	4-Aug-89	N/A	N/A	126	91	72.22		N/A	N/A	27-Oct-89	80

# Back Bay National Wildlife Refuge

1970-2000 Sea Turtle Nest Information Key: BBNWR=Back Bay National Wildlife Refuge; FCSP=False Cape State Park; SB=Sandbridge, Dam Neck, and Little Island City Park beaches; VB=Virginia Beach Resort Strip, Fort Story, and Croatan beaches \*\*\*Nest Success Rate=(#Eggs/#Hatchlings Emerged)\*100 N/A= Data not available Bottom Incubation Top # Hatchlings Nest Period Nest Nest Nest # (T Emerged from Success **Exact Location of Hatch Date** (days) Depth indicate Rate(%)\*\*\* Comments Depth Nest # Eggs Nest\*\*(see key) Date of Nest Locality transmitted) 67 25.5 96.5 5-Aug-91 0.5m S FCSP N border 84.14 145 122 29-May-91 FCSP 28 66 25 53 6-Sep-91 95.71 1.6m S BBNWR ramp 140 134 BBNWR 25-Jul-91 29 73 25 50 7-Oct-91 95.60 3.5m S FCSP N border 91 87 **FCSP** 25-Jul-91 30 71 31 48 7-Oct-91 76.11 0.5m S Rudee Inlet 113 86 27-Jul-91 VB 31 70 30 48 7-Oct-91 113 83.09 2.6m S BBNWR ramp 136 28-Jul-91 **BBNWR** 32 80 45 28-Oct-91 20 59.14 0.25m N FCSP N 93 55 BBNWR 9-Aug-91 33 border Only 33 25 53 7-Nov-91 89 72 58.06 0.80m N FCSP N 124 BBNWR 34 12-Aug-91 released border 76 26 65 24-Sep-92 106 83.46 Dam Neck 127 9-Jul-92 SB 35 37 63 1-Oct-92 78 70 (52 exc) 70.00 100 BBNWR 2m S BBNWR ramp 14-Jul-92 36 N/A tagged 26 56 N/A 0 1.5m S BBNWR ramp 0 BBNWR 112 30-Jul-92 37T QQB582,583, 585, 586 82.82 17 53 13-Aug-93 64 0.75m S BBNWR ramp 135 (56 exc) 163 BBNWR 10-Jun-93 38 16 53 26-Aug-93 60 7m S BBNWR ramp 153 134 87.58 FCSP 39 24-Jun-93 59 94.78 33 65 27-Aug-93 3.8m S BBNWR ramp 134 127 (1 exc) BRNWR 40 28-Jun-93 56 10-Sep-93 60 74.03 tagged 30.5 0.5m S BBNWR ramp 154 114 BBNWR 11-Jul-93 41T QQB587-590 57 6-Oct-93 72 5.5m S BBNWR ramp 117 88.64 42 132 FCSP 25-Jul-93 42 tagged 1m S Wash Woods no 8-Jul-94 FCSP SSB895, 892, nest 896, 897 61 51 24-Aug-95 1m S FCSP Barbour Hill 144 133 92 36 37 FCSP 43 24-Jun-95 ramp 62 56.5 8-Sep-95 0.3m S FCSP N border 144 133 92.36 30 FCSP 9-Jul-95 44 93 N/A 5-Sep-95 31 1m N BBNWR N border 98 61 62.24 SB 10-Jul-95 45 65 34.5 54 6-Oct-95 1.2m S BBNWR ramp 131 114 87.02 1-Aug-95 BBNWR 46 QQB587-590 3-Nov-95 112 43 53 94.05 1.5m S BBNWR ramp 84 79 14-Aug-95 BBNWR 47T Recapture (588 missing) 80 34 57 5-Oct-96 46th Street 123 107 86.99 VB 48 7-Aug-96 50.1 26-Oct-96 81 30.1 41.30 tagged 62nd Street 138 57 VB 9-Aug-96 49T 17-Aug-97 45 66 56.77 27 100yards S Dune Trail 155 88 50 12-Jun-97 BBNWR 5-Sep-97 66 40 64 0.25m N BBNWR N 148 114 77.03 1-Jul-97 51 SB 65 QQBB587 29 41 18-Sep-97 0.25m S Dune Trail 156 145 92.95 BBNWR 14-Jul-97 52T Recapture 27-Sep-97 69 52.5 tagged 36 200yards N FC Landing 69 62 89.86 20-Jul-97 **FCSP** 53T ramp 62 1-Oct-97 64 43 110 92.44 60yards S Dune Trail 119 29-Jul-97 BBNWR 54 65 24-Sep-98 67 45 500yards S BBNWR N 94 81 86.17 BBNWB 55 20-Jul-98 border 74 31 65 3-Oct-98 92.26 0.10m N FCSP border 168 155 30-Jul-98 BRNWR 56 60 97.76 24 45 24-Aug-99 131 **BBNWR** 1.6m S BBNWR ramp 134 25-Jun-99 57 69 14-Sep-99 88 95.65 33 59 92 9m S FC Landing ramp 7-Jul-99 **FCSP** 58

2.6m S BBNWR ramp

BBNWR

11-Jul-00

59T

115

56 (30 exc)

48.70

48.3

19

2-Sep-00

74

Figure 8. 1980-2000 BBNWR Individual Nest Success Rates (Below)

1980-2000 BBNWR Ne	st Success Rates
Nest Success	Number of Nests
0-10%	0
0-20%	2
21-30%	1
31-40%	2
41-50%	2
51-60%	2
61-70%	3
71-80%	5
81-90%	18
91-100	19

Pate of Nest         Rate(%)***         Period (days)           7-25-80         87         65           7-26-82         69         82           7-13-83         38         62           6-14-85         88         79           6-15-85         39         84           6-29-85         97         65           8-5-85         96         67           7-31-86         90         72           6-26-87         95         92           6-29-87         75         61           7-10-87         91         61           7-24-87         98         68           7-29-87         85         64           8-6-87         93         72           6-5-89         0         N/A           6-6-89         89         61           6-23-89         88         66           7-7-89         95         64           7-11-89         92         64           7-21-89         87         65           7-25-89         93         70           8-4-89         72         80           5-29-91         84         67		Nest Success	Incubation
7-26-82       69       82         7-13-83       38       62         6-14-85       88       79         6-15-85       39       84         6-29-85       97       65         8-5-85       96       67         7-31-86       90       72         6-26-87       95       92         6-29-87       75       61         7-10-87       91       61         7-24-87       98       68         7-29-87       85       64         8-6-87       93       72         6-5-89       0       N/A         6-6-89       89       61         6-23-89       88       66         7-7-89       95       64         7-11-89       92       64         7-21-89       87       65         7-25-89       93       70         8-4-89       72       80         5-29-91       84       67         7-25-91       96       73         7-25-91       96       73         7-27-91       76       71         7-28-91       59       80	Date of Nest	Rate(%)***	Period (days)
7-13-83		<del>-</del>	
6-14-85 88 79 6-15-85 39 84 6-29-85 97 65 8-5-85 96 67 7-31-86 90 72 6-26-87 95 92 6-29-87 75 61 7-10-87 91 61 7-24-87 98 68 7-29-87 85 64 8-6-87 93 72 6-5-89 0 N/A 6-6-89 89 61 6-23-89 88 66 7-7-89 95 64 7-11-89 92 64 7-21-89 87 65 7-25-89 93 70 8-4-89 72 80 8-4-89 72 80 8-9-91 84 67 7-25-91 96 66 7-25-91 96 73 7-27-91 76 71 7-28-91 83 70 8-9-91 84 67 7-30-92 0 N/A 6-10-93 83 64 6-24-93 88 60 6-28-93 95 79 7-11-93 74 60 7-25-93 89 72 6-24-95 92 62 7-10-95 62 93 8-14-95 94 112 8-7-96 87 80 8-9-96 41 81 6-12-97 77 66 7-14-97 93 65 7-20-97 90 69 7-20-98 86 67 7-30-98 96 6-25-99 98 60 6-25-99 98 60 6-25-99 98 60			
6-15-85			
6-29-85 97 65 8-5-85 96 67 7-31-86 90 72 6-26-87 95 92 6-29-87 75 61 7-10-87 91 61 7-24-87 98 68 7-29-87 85 64 8-6-87 93 72 6-5-89 0 N/A 6-6-89 89 61 6-23-89 88 66 7-7-89 95 64 7-11-89 92 64 7-21-89 87 65 7-25-89 93 70 8-4-89 72 80 5-29-91 84 67 7-25-91 96 66 7-25-91 96 73 7-27-91 76 71 7-28-91 83 70 8-9-91 59 80 8-12-91 58 89 7-9-92 83 76 7-14-92 70 78 7-30-92 0 N/A 6-10-93 83 64 6-24-93 88 60 6-28-93 95 59 7-11-93 74 60 7-25-93 89 72 6-24-95 92 61 7-9-95 92 62 7-10-95 62 93 8-1-95 87 65 8-14-95 94 112 8-7-96 87 80 8-9-96 41 81 6-12-97 77 66 7-14-97 93 65 7-20-97 90 69 7-20-98 86 67 7-30-98 92 74 6-25-99 98 60			
8-5-85 96 67 7-31-86 90 72 6-26-87 95 92 6-29-87 75 61 7-10-87 91 61 7-24-87 98 68 7-29-87 85 64 8-6-87 93 72 6-5-89 0 N/A 6-6-89 89 61 6-23-89 88 66 7-7-89 95 64 7-11-89 92 64 7-21-89 87 65 7-25-89 93 70 8-4-89 72 80 5-29-91 84 67 7-25-91 96 66 7-25-91 96 73 7-27-91 76 71 7-28-91 83 70 8-9-91 59 80 8-12-91 58 89 7-9-92 83 76 7-14-92 70 78 7-30-92 0 N/A 6-10-93 83 64 6-24-93 88 60 6-28-93 95 59 7-11-93 74 60 7-25-93 89 72 6-24-95 92 62 7-10-95 62 93 8-1-95 87 865 8-14-95 94 112 8-7-96 87 80 8-9-96 41 81 6-12-97 77 66 7-1-97 77 66 7-20-98 86 67 7-20-98 86 67 7-20-98 86 67 7-20-98 96 69			
7-31-86 90 72 6-26-87 95 92 6-29-87 75 61 7-10-87 91 61 7-24-87 98 68 7-29-87 85 64 8-6-87 93 72 6-5-89 0 N/A 6-6-89 89 61 6-23-89 88 66 7-7-89 95 64 7-11-89 92 64 7-21-89 87 65 7-25-89 93 70 8-4-89 72 80 5-29-91 84 67 7-25-91 96 66 7-25-91 96 73 7-27-91 76 71 7-28-91 83 70 8-9-91 59 80 8-12-91 58 89 7-9-92 83 76 7-14-92 70 78 7-30-92 0 N/A 6-10-93 83 64 6-24-93 88 60 6-28-93 95 59 7-11-93 74 60 7-25-93 89 72 6-24-95 92 61 7-9-95 92 62 7-10-95 62 93 8-1-95 87 865 8-14-95 94 112 8-7-96 87 80 8-9-96 41 81 6-12-97 77 66 7-1-97 77 66 7-20-98 86 67 7-30-98 92 74 6-25-99 98 60 6-7-7-99 96 69		97	65
6-26-87 95 92 6-29-87 75 61 7-10-87 91 61 7-24-87 98 68 7-29-87 85 64 8-6-87 93 72 6-5-89 0 N/A 6-6-89 89 61 6-23-89 88 66 7-7-89 95 64 7-11-89 92 64 7-21-89 87 65 7-25-89 93 70 8-4-89 72 80 5-29-91 84 67 7-25-91 96 66 7-25-91 96 73 7-27-91 76 71 7-28-91 83 70 8-9-91 59 80 8-12-91 58 89 7-9-92 83 76 7-14-92 70 78 7-30-92 0 N/A 6-10-93 83 64 6-24-93 88 60 6-28-93 95 59 7-11-93 74 60 7-25-93 89 72 6-24-95 92 61 7-9-95 92 62 7-10-95 62 93 8-14-95 94 112 8-7-96 87 80 8-9-96 41 81 6-12-97 57 66 7-14-97 77 66 7-14-97 93 65 7-20-98 86 67 7-30-98 92 74 6-25-99 98 60		96	67
6-29-87			72
7-10-87         91         61           7-24-87         98         68           7-29-87         85         64           8-6-87         93         72           6-5-89         0         N/A           6-6-89         89         61           6-23-89         88         66           7-7-89         95         64           7-11-89         92         64           7-21-89         87         65           7-25-89         93         70           8-4-89         72         80           5-29-91         84         67           7-25-91         96         66           7-25-91         96         73           7-27-91         76         71           7-28-91         83         70           8-9-91         59         80           8-12-91         58         89           7-9-92         83         76           7-14-92         70         78           7-30-92         0         N/A           6-10-93         83         64           6-24-93         88         60           6-28-93			92
7-24-87       98       68         7-29-87       85       64         8-6-87       93       72         6-5-89       0       N/A         6-6-89       89       61         6-23-89       88       66         7-7-89       95       64         7-11-89       92       64         7-21-89       87       65         7-25-89       93       70         8-4-89       72       80         5-29-91       84       67         7-25-91       96       66         7-25-91       96       73         7-27-91       76       71         7-28-91       83       70         8-9-91       59       80         8-12-91       58       89         7-9-92       83       76         7-14-92       70       78         7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72			
7-29-87       85       64         8-6-87       93       72         6-5-89       0       N/A         6-6-89       89       61         6-23-89       88       66         7-7-89       95       64         7-11-89       92       64         7-21-89       87       65         7-25-89       93       70         8-4-89       72       80         5-29-91       84       67         7-25-91       96       66         7-25-91       96       73         7-27-91       76       71         7-28-91       83       70         8-9-91       59       80         8-12-91       58       89         7-9-92       83       76         7-14-92       70       78         7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61			
8-6-87       93       72         6-5-89       0       N/A         6-6-89       89       61         6-23-89       88       66         7-7-89       95       64         7-11-89       92       64         7-21-89       87       65         7-25-89       93       70         8-4-89       72       80         5-29-91       84       67         7-25-91       96       66         7-25-91       96       73         7-27-91       76       71         7-28-91       83       70         8-9-91       59       80         8-12-91       58       89         7-9-92       83       76         7-14-92       70       78         7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62			
6-5-89			
6-6-89 89 61 6-23-89 88 66 7-7-89 95 64 7-11-89 92 64 7-21-89 87 65 7-25-89 93 70 8-4-89 72 80 5-29-91 84 67 7-25-91 96 66 7-25-91 96 73 7-27-91 76 71 7-28-91 83 70 8-9-91 59 80 8-12-91 58 89 7-9-92 83 76 7-14-92 70 78 7-30-92 0 N/A 6-10-93 83 64 6-24-93 88 60 6-28-93 95 59 7-11-93 74 60 7-25-93 89 72 6-24-95 92 61 7-9-95 92 62 7-10-95 62 93 8-1-95 87 65 8-14-95 94 112 8-7-96 87 80 8-9-96 41 81 6-12-97 57 66 7-1-97 77 66 7-1-97 77 66 7-1-97 77 66 7-29-97 90 69 7-29-97 92 64 7-20-98 86 67 7-30-98 96 69			
6-23-89 88 66 7-7-89 95 64 7-11-89 92 64 7-21-89 87 65 7-25-89 93 70 8-4-89 72 80 5-29-91 84 67 7-25-91 96 66 7-25-91 96 73 7-27-91 76 71 7-28-91 83 70 8-9-91 59 80 8-12-91 58 89 7-9-92 83 76 7-14-92 70 78 7-30-92 0 N/A 6-10-93 83 64 6-24-93 88 60 6-28-93 95 59 7-11-93 74 60 7-25-93 89 72 6-24-95 92 61 7-9-95 92 62 7-10-95 62 93 8-1-95 87 65 8-14-95 94 112 8-7-96 87 80 8-9-96 41 81 6-12-97 77 66 7-14-97 77 66 7-14-97 93 65 7-20-97 90 69 7-29-97 92 64 7-20-98 86 67 7-30-98 92 74 6-25-99 98 60			
7-7-89 95 64 7-11-89 92 64 7-21-89 87 65 7-25-89 93 70 8-4-89 72 80 5-29-91 84 67 7-25-91 96 66 7-25-91 96 73 7-27-91 76 71 7-28-91 83 70 8-9-91 59 80 8-12-91 58 89 7-9-92 83 76 7-14-92 70 78 7-30-92 0 N/A 6-10-93 83 64 6-24-93 88 60 6-28-93 95 59 7-11-93 74 60 7-25-93 89 72 6-24-95 92 61 7-9-95 92 62 7-10-95 62 93 8-1-95 87 65 8-14-95 94 112 8-7-96 87 80 8-9-96 41 81 6-12-97 57 66 7-14-97 77 66 7-14-97 93 65 7-20-97 90 69 7-29-97 92 64 7-20-98 86 67 7-30-98 92 74 6-25-99 98 60			_
7-11-89       92       64         7-21-89       87       65         7-25-89       93       70         8-4-89       72       80         5-29-91       84       67         7-25-91       96       66         7-25-91       96       73         7-27-91       76       71         7-28-91       83       70         8-9-91       59       80         8-12-91       58       89         7-9-92       83       76         7-14-92       70       78         7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       82       93         8-1-95       87       85         8-1-95       87       80         8-9-96       41       81			
7-21-89       87       65         7-25-89       93       70         8-4-89       72       80         5-29-91       84       67         7-25-91       96       66         7-25-91       96       73         7-27-91       76       71         7-28-91       83       70         8-9-91       59       80         8-12-91       58       89         7-9-92       83       76         7-14-92       70       78         7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       62       93         8-1-95       87       85         8-1-95       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       90       69			
7-25-89       93       70         8-4-89       72       80         5-29-91       84       67         7-25-91       96       66         7-25-91       76       71         7-28-91       83       70         8-9-91       59       80         8-12-91       58       89         7-9-92       83       76         7-14-92       70       78         7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       62       93         8-1-95       87       65         8-1-95       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-20-97       90       69         7-20-98       86       67			
8-4-89       72       80         5-29-91       84       67         7-25-91       96       66         7-25-91       76       71         7-28-91       83       70         8-9-91       59       80         8-12-91       58       89         7-9-92       83       76         7-14-92       70       78         7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       62       93         8-1-95       87       65         8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-20-97       90       69         7-20-98       86       67			
5-29-91       84       67         7-25-91       96       66         7-25-91       76       71         7-28-91       83       70         8-9-91       59       80         8-12-91       58       89         7-9-92       83       76         7-14-92       70       78         7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       62       93         8-1-95       87       65         8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-20-97       90       69         7-20-98       86       67         7-30-98       92       74			
7-25-91       96       66         7-25-91       76       71         7-28-91       83       70         8-9-91       59       80         8-12-91       58       89         7-9-92       83       76         7-14-92       70       78         7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       62       93         8-1-95       87       65         8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       77       66         7-1-97       77       66         7-20-97       90       69         7-20-97       90       69         7-20-98       86       67         7-30-98       92       74			i
7-25-91       96       73         7-27-91       76       71         7-28-91       83       70         8-9-91       59       80         8-12-91       58       89         7-9-92       83       76         7-14-92       70       78         7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       62       93         8-1-95       87       65         8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-14-97       93       65         7-20-97       90       69         7-20-97       90       69         7-20-98       86       67         7-30-98       92       74			
7-27-91       76       71         7-28-91       83       70         8-9-91       59       80         8-12-91       58       89         7-9-92       83       76         7-14-92       70       78         7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       62       93         8-1-95       87       65         8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-1-97       90       69         7-20-97       90       69         7-20-98       86       67         7-30-98       92       74         6-25-99       98       60			ĺ
7-28-91       83       70         8-9-91       59       80         8-12-91       58       89         7-9-92       83       76         7-14-92       70       78         7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       62       93         8-1-95       87       65         8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-14-97       93       65         7-20-97       90       69         7-29-97       92       64         7-20-98       86       67         7-30-98       92       74         6-25-99       98       60			
8-9-91       59       80         8-12-91       58       89         7-9-92       83       76         7-14-92       70       78         7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       62       93         8-1-95       87       65         8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-1-97       93       65         7-20-97       90       69         7-20-97       92       64         7-20-98       86       67         7-30-98       92       74         6-25-99       98       60         97-7-99       96       69			
8-12-91       58       89         7-9-92       83       76         7-14-92       70       78         7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       82       93         8-1-95       87       65         8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-1-97       90       69         7-20-97       90       69         7-20-98       86       67         7-30-98       92       74         6-25-99       98       60         97-7-99       96       69			· ·
7-9-92       83       76         7-14-92       70       78         7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       62       93         8-1-95       87       65         8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-1-97       90       69         7-20-97       90       69         7-29-97       92       64         7-20-98       86       67         7-30-98       92       74         6-25-99       98       60         97-7-99       96       69			
7-14-92       70       78         7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       62       93         8-1-95       87       65         8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-1-97       93       65         7-20-97       90       69         7-29-97       92       64         7-20-98       86       67         7-30-98       92       74         6-25-99       98       60         97-7-99       96       69			
7-30-92       0       N/A         6-10-93       83       64         6-24-93       88       60         6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       62       93         8-1-95       87       65         8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-1-97       93       65         7-20-97       90       69         7-29-97       92       64         7-20-98       86       67         7-30-98       92       74         6-25-99       98       60         7-7-99       96       69			l l
6-10-93 83 64 6-24-93 88 60 6-28-93 95 59 7-11-93 74 60 7-25-93 89 72 6-24-95 92 61 7-9-95 92 62 7-10-95 62 93 8-1-95 87 65 8-14-95 87 65 8-14-95 94 112 8-7-96 87 80 8-9-96 41 81 6-12-97 57 66 7-1-97 77 66 7-1-97 77 66 7-14-97 93 65 7-20-97 90 69 7-29-97 92 64 7-20-98 86 67 7-30-98 92 74 6-25-99 98 60			
6-24-93 88 60 6-28-93 95 59 7-11-93 74 60 7-25-93 89 72 6-24-95 92 61 7-9-95 92 62 7-10-95 62 93 8-1-95 87 65 8-14-95 94 112 8-7-96 87 80 8-9-96 41 81 6-12-97 57 66 7-1-97 77 66 7-1-97 77 66 7-14-97 93 65 7-20-97 90 69 7-29-97 92 64 7-20-98 86 67 7-30-98 92 74 6-25-99 98 60	6-10-93		1
6-28-93       95       59         7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       62       93         8-1-95       87       65         8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-14-97       93       65         7-20-97       90       69         7-29-97       92       64         7-20-98       86       67         7-30-98       92       74         6-25-99       98       60         7-7-99       96       69	6-24-93		ľ
7-11-93       74       60         7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       62       93         8-1-95       87       65         8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-1-97       93       65         7-20-97       90       69         7-29-97       92       64         7-20-98       86       67         7-30-98       92       74         6-25-99       98       60         7-7-99       96       69	6-28-93		
7-25-93       89       72         6-24-95       92       61         7-9-95       92       62         7-10-95       62       93         8-1-95       87       65         8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-14-97       93       65         7-20-97       90       69         7-29-97       92       64         7-20-98       86       67         7-30-98       92       74         6-25-99       98       60         97-7-99       96       69	7-11-93		
7-9-95       92       62         7-10-95       62       93         8-1-95       87       65         8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-14-97       93       65         7-20-97       90       69         7-29-97       92       64         7-20-98       86       67         7-30-98       92       74         6-25-99       98       60         17-7-99       96       69	7-25-93	89	1
7-10-95       62       93         8-1-95       87       65         8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-14-97       93       65         7-20-97       90       69         7-29-97       92       64         7-20-98       86       67         7-30-98       92       74         6-25-99       98       60         7-7-99       96       69	6-24-95	92	61
8-1-95     87     65       8-14-95     94     112       8-7-96     87     80       8-9-96     41     81       6-12-97     57     66       7-1-97     77     66       7-14-97     93     65       7-20-97     90     69       7-29-97     92     64       7-20-98     86     67       7-30-98     92     74       6-25-99     98     60       97-7-99     96     69	7-9-95	92	62
8-14-95       94       112         8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-14-97       93       65         7-20-97       90       69         7-29-97       92       64         7-20-98       86       67         7-30-98       92       74         6-25-99       98       60         17-7-99       96       69			1
8-7-96       87       80         8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-14-97       93       65         7-20-97       90       69         7-29-97       92       64         7-20-98       86       67         7-30-98       92       74         6-25-99       98       60         7-7-99       96       69			
8-9-96       41       81         6-12-97       57       66         7-1-97       77       66         7-14-97       93       65         7-20-97       90       69         7-29-97       92       64         7-20-98       86       67         7-30-98       92       74         6-25-99       98       60         17-7-99       96       69			
6-12-97 57 66 7-1-97 77 66 7-14-97 93 65 7-20-97 90 69 7-29-97 92 64 7-20-98 86 67 7-30-98 92 74 6-25-99 98 60 7-7-99 96 69			
7-1-97 77 66 7-14-97 93 65 7-20-97 90 69 7-29-97 92 64 7-20-98 86 67 7-30-98 92 74 6-25-99 98 60 7-7-99 96 69			
7-14-97 93 65 7-20-97 90 69 7-29-97 92 64 7-20-98 86 67 7-30-98 92 74 6-25-99 98 60 7-7-99 96 69			
7-20-97 90 69 7-29-97 92 64 7-20-98 86 67 7-30-98 92 74 6-25-99 98 60 7-7-7-99 96 69			
7-29-97 92 64 7-20-98 86 67 7-30-98 92 74 6-25-99 98 60 7-7-7-99 96 69			
7-20-98 86 67 7-30-98 92 74 6-25-99 98 60 7-7-99 96 69			
7-30-98 92 74 6-25-99 98 60 7-7-99 96 69			1
6-25-99 98 60 7-7-99 96 69			
7-7-99 96 69			
			1
			1

Figures 11 and 12. BBNWR Individual Nest Success Rates and Top and Bottom Nest Depths.

	Nest Success		Bottom Nest
Date	Rate(%)***	Top Nest Depth	Depth
29-May-91	84.14	25.5	96.5
2-Jul-91	95.71	25	53
25-Jul-91	95.60	25	50
27-Jul-91	76.11	31	48
28-Jul-91	83.09	30	48
9-Aug-91	59.14	20	45
12-Aug-91	58.06	25	53
9-Jul-92	83.46	26	65
14-Jul-92	70.00	37	63
30-Jul-92	0	26	56
10-Jun-93	82.82	17	53
24-Jun-93	87.58	16	53
28-Jun-93	94.78	33	65
11-Jul-93	74.03	30.5	56
25-Jul-93	88.64	42	57
24-Jun-95	92.36	37	51
9-Jul-95	92.36	30	56.5
10-Jul-95	62.24	31	N/A
1-Aug-95	87.02	34.5	54
- F			
14-Aug-95	94.05	43	53
7-Aug-96	86.99	34	57
9-Aug-96	41.30	30.1	50.1
12-Jun-97	56.77	27	45
1-Jul-97	77.03	40	64
14-Jul-97	92.95	29	41
20-Jul-97	89.86	36	52.5
29-Jul-97	92.44	43	62
20-Jul-98	86.17	45	65
30-Jul-98	92.26	31	65
25-Jun-99	97.76	24	45
7-Jul-99	95.65	33	59
11-Jul-00	48.70	19	48.3

# APPENDIX 6

2000 SEA TURTLE PATROL EXPENSES

# 2000 Sea Turtle Program Expenses

Charges Made To ACOE:

Turtle Related				
Biotech Hours:	Pay Period	M Farrell	C Wicker	
	12	50	32	
	13	41	32	
	14	51	32	
	15	31	32	
	16	51	38	
	17	56	53	
	18	32	36	
	19	48	68	
	20	73	0	
	TOTALS	433	323	=756
			(GS 5)	@ 10.93/hour
1				=\$8,263.08
Other Biotech He	ours:			\$6,143.08
Equipment:	Umbrella, Repa	ir, Skull Caps	,	\$976.96
[qa.pmom	<u> </u>			\$15,383.12

Charges Made To BBNWR:

Charges Made to Bolywn.			
Patrol Hours (Biotech	not included)		
	inteer 434	(VMSM)	
Inter	rn (Stipend) 153	(Andy and Eric)	\$191.25
	,		
		(Lamar, Sara, Cesar,	
Staff	f (GS 5) 194	Daffny, Brighid)	\$2,120.42
II	ALS (715 patrol hou	irs)	
	, ,		=\$2,311.67
Vehicle Repairs More	ning Patrols \$3,263.69		
	nt Patrols \$343.00		
11	TALS		\$3,606.69
<u> </u>			\$5,918.36

Corp Funding	\$20,700
ACOE Funding Minus Denver Cut (38%	=\$12,834

# Charges made to Back Bay National Wildlife Refuge Account Back Bay National Wildlife Refuge 2000 Sea Turtle Program

	Vehicle Repairs fo	r Morning Patr	ols
Data	Item Description	Repaired by	Cost
Date 02/16/00 02/16/00	94 Honda ATV tune up Repairs to 94 Honda ATV 98 Suzuki ATV tune up	Honda of VB Honda of VB Honda of VB	\$72.66 \$1,376.00 \$70.50
02/16/00 06/05/00 07/07/00 07/25/00 07/31/00	12 cans WD40 Yamaha ATV tire mounting New tires for Yamaha ATV 98 Suzuki ATV piston, cylinder	Pleasant Ridge Auto Parts Kramer Tire Honda of VB Cycle World	\$41.88 \$50.00 \$132.16 \$482.10
09/05/00 09/07/00 09/21/00	98 Suzuki ATV piston, cylinder board, gasket repairs and oil 94 Honda ATV clutch repair Suzuki ATV gear repairs Yamaha ATV tune up and tires	Honda of VB Cycle World Cycle World Total =	\$456.00 \$102.00 \$480.39 \$3,263.69

		Summary of Vehicle Rep	pairs for Night	Patrols
Date		Description	Repaired by	Cost
Date		Gas tank replacement for '93 Jeep	Witchduck Used Auto	\$42.00 out of \$140.00 (30%)
	April-Sept.	Repairs for '91 Jeep Repairs for '93 Jeep 2 Flat tires Routine maint.: oil changes, fluids,	BBNWR BBNWR	\$81.00 \$220.00 misc . misc.
		washing off vehicles	Total =	343+misc.

Night Patrol Related Manpower (June & July)						
Name	Title	Hours	Rate	Total Cost		
Sara Williams	Refuge Jr. Biologist	35+16	GS-4	\$498.27		
Lamar Gore	Refuge Wildlife Biologist	5	GS-9	\$82.85		
Eric Duran	Refuge Intern	38+40	stipend pay	\$97.50 \$93.75		
Andy Campomizzi Cesar Freytes	Refuge Intern Maintenance Mechanic	35+40	stipend pay ~\$15.00/hour	\$93.73 \$1,020		
		~68	$\frac{\sim $15.00/1001}{\text{Total}} =$	\$1,792.37		

Grand Total = \$5,399.06

# Charges made to Army Corp of Engineers Account Back Bay National Wildlife Refuge 2000 Sea Turtle Program

Supplies								
Date	Date Item Retailer Cost							
06/16/00	Sun Umbrella	Superwalmart	\$23.92					
06/16/00	Gator Repair	Hobbs Implement Co,	\$873.84					
06/16/00	Skull Caps for Helmets	Flight Suits	\$79.20					
ļ	-	Total =	\$976.96					

Salaries					
Employee Name	Pay Period (Month)	Hours	Salary		
Chris Wicker	12 (June)	80	925.53		
Chris Wicker	13 (June)	80	858.27		
Micheal Farrell	13 (June)	80	875.16		
Chris Wicker	14 (June)	80	922.46		
Micheal Farrell	14 (June)	80	841.39		
Chris Wicker	15 (July)	80	925.49		
Micheal Farrell	15 (July)	80	846.14		
Chris Wicker	16 (July)	80	883.42		
Micheal Farrell	16 (July)	80	941.1		
Chris Wicker	`17 (July)	80	947.48		
Micheal Farrell	17 (July)	80	948.67		
Chris Wicker	18 (July)	80	883.42		
Micheal Farrell	18 (July)	80	781.61		
Chris Wicker	19 (Sept.)	80	967.56		
Micheal Farrell	19 (July)	80	929.23		
Micheal Farrell	20 (July)	<u>80</u>	<u>929.23</u>		
		Total =	\$14,406.16		

Grand Total = \$15,383.12

# Night Patrol Volunteer Schedule

June 2000

	95 Daily night patrols cancelled, effective immediately	29 M. C. Ferrell(8) Demetrius Klams(5.5) Crystal Mirt(7)	28 E. Duran(1) Beverly Bachman(1) Ginny Gehgan(1)	27 A. Campomizzi(3) Nancy Borton(2.5)  = \$2,278.50	26 A. Campomizzi(8) RobertBastone(7) Jackie Daley(4) C. Matyseck(7) C. Matyseck(7)	E. Duran(8) Nancy Hansen(7) Jim Thompson(7) Otal Volunteer Hours:
24 E. Duran(8) Deb Adcock(7.5) Benny Hamblin(7) Andrea Kross(6.5)	23 M. C. Ferrell(8) D.Hendrickson(7.5) Barbara McCane(7.5) Caryl Thompson(7.5)	22 M. C. Ferrell(8) Marcial Garcia(7.5) Joan Redfearn(7) MZimmerman(7.5)	12 (8) iszimoomizzi (8) Beverly Bachman (6.5) Ginny Gehgan (6.5) Rick Contreras (6.5)	20 Sara Williams(3) Cheryl Marcinko(3)	91 S. Williams Night Patrol cancelled due to severe weather	E. Duran (2) Might Patrol Cancelled-E. Duran sick and severe weather weather Jim Thompson (2.1)
F. Duran(3) and L. Gore(5) Benny Hamblin (7) Roseann and Peter Fitzpatrick(14)	16 (8) M.C. Ferrell(8) (2.K.Borgognon, 7.S) Barbara McCane(7.5) Dustie Werner(7)	P. Perell(8) M.C. Ferell(8) Marcial Garcia(7.5) DemetriusKlams(7) M.Zimmerman(7.5)	14 S. Williams(8) Beverly Bachman (3hrs) Ginny Gehgan(7.5) Crystal Mirt(7)	13  S. Williams(8)  Mancy Borton(7)  CherylMarcinko(7)  CherylCortemelgia(7)  )	12 A.Campomizzi(8) RobertBastone(7) Jennifer Jeffers(7) C. Matyseck(7)	11 E. Duran(8) Bob and Kathy Marchant(15) Mancy Hansen(7.5)
10 E. Duran(8) Benny Hamblim(7) Andrea Kross(7) Caryl Thompson(7)	9 M.C. Ferell(8) Dave Hendrickson(7.5) Dustie Werner(7.5) Debbie Adcock(7.5)	8 M.C. Ferell(8) Demetrian Klams (7) Gary Watts(6.5) Marian and Gentry Childress(14)	7 (8) izzimopoms J.A (4) Bargo(4) (7) Marg. S. immerman Marg. S. (2) (2.1) nedgəĐ yuni (2.5)	6 S. Williams(8) Cheryl Marcinko(7.5) Nancy Borton(7.5) Joan Redfearn(7)	2 S. Williams(8) Bob (7.7) and Kathy(7.7) Marchant Robert Bastone(7.5)	
Saturday	Гиразу	Thursday	Wednesday	Тиезаау	Мопазу	Sunday

Break Down of Staff Hours and Expense: 35 hrs@GS-4 = \$341.95

603 hours total

Total Staff Hours: +169

\$1,128.13

\$0.912\$

\$ 85.85

Biotechnician (56 hours) = \$612.08

= 6-80 @sid c

73 hours stipend pay = \$ 91.25

# Night Patrol Schedule July/August 2000

	_	1233 103		· ·	isuguA bns ylul
87	LZ	97	52	IE/ <b>†</b> 7	06/67
4 (8) E Duran (8) M Farrell (8)	\$ E Duran (8) ACampomizzi (8)	2 ACampomizzi (8) C Wicker (8)	AUGUST 1 S Williams (8) C Wicker (8)	31 S Williams (8) C Wicker(8)	30 ACampomizzi (8) C Wicker (8)
28 E Duran (8) M. Farrell (8)	72 (8) Harrell (8) ACampomizzi(8)	<b>26</b> B Duran (8) E Duran (8) ACampomizzi(8)	57	<b>Þ</b> 7	57
Friday 12	7. Thursday	16 Wednesday	I nesquh	71 YepuoM	20 IOF A 16 Sanday
	E Duran (8) M. Farrell (8)  4  E Duran (8)  M Farrell (8)	27 28 E Duran (8) ACampomizzi (8) ACampomizzi (8) A E Duran (8) A E Dura	28	25 26 E Duran (8) A Campomizzi (8) A E Duran	24/31 25 26 26 27 28 28 29 29 29 29 29 29 29 29 29 29 29 29 29

Break Down of Staff Hours and Expenses:

16 hours @ GS4
80 hours stipend pay

 $\frac{001}{160}$  Istot stude fotal

+Total Staff Hours:

Total Volunteer Hours:

+64 hours Biotechnician

28.828 = 48.828

00.001\$ =

28.381 \$=

# PAYROLL REPORT

Organization Code: 51510

	SUB	PROJ	FIX.	SPEC.				
	MO ACT	#	CODE	CODE	HRS	REG.PAY	ADD.PAY	PP#
	jun 1926	0390	cor\$	-0-	80.	\$859.76	\$65.77	0012
	un 1926	0390	cor\$	-0-	80.	\$797.28	\$60.99	0013
1 2	un 1926	0390	cor\$	-0-	80.	\$812.96	\$62.20	0013
<b>4</b> 9	un 1926	0390	cor\$	-0-	80.	\$859.68	\$62.78	0014
4 2	un 1926	0390	cor\$	-0-	80.	\$781.60	\$59.79	0014
Chris Wicker y j		0390	cor\$	-0-	80.	\$859.72	\$65.77	0015
Michael Farr y j		0390	cor\$	-0-	80.	\$786.01	\$60.13	0015
Chris Wicker y j		0390	cor\$	-0-	80.	\$820.64	\$62.78	0016
Michael Farr y j			cor\$	-0-	80.	\$874.22	\$66.88	0016
Chris Wicker y j			cor\$	-0-	80.	\$880.15	\$67.33	0017
Michael Farr y j			cor\$	-0-	80.	\$888.73	\$59.94	0017
Chris Wicker y j			cor\$	-0-	80.	\$820.64	\$62.78	0018
Michael Farr y j		0390	cor\$	-0-	80.	\$781.61	\$0.00	0018
Chris Wicker y s	-	0390	cor\$	-0-	80.	\$898.80	\$68.76	0019
		0390	cor\$	-0-	80.	\$863.19	\$66.04	0019
Michael Farr y j	ul 1926	0390	cor\$	-0-	80.	\$863.19	\$66.04	0020

Totals: \$13,448.18 \$957.98 Grand Total: \$14,406.16

DCRLOG:	SHOWS DATA STORED IN TABLE "COSTS".		
	DOCUMENT CONTROL REGISTER	j	
Organ	ization Code: 51510		
06/16/00	SUB. PROJ. FIX. SPEC.  DCN NUMB.NUMB. CODE CODE R VENDOR NAME 5151000157a 1926 0390 cor\$ 261a y MC Swoope superwalmart; sun umbrella	AMOUNT \$23	Ant. Exp?
06/16/00 Comment:	5151000157a 1926 0390 cor\$ 257d y MC Swoope hobbs implement co; work on gator	\$873	84 N
06/16/00 Comment:	5151000157a 1926 0390 cor\$ 261a y MC Swoope flight suits; skull caps for turtle patrol	\$79	20 N
	Organization Total:	**************************************	76 <b>.</b> 96
	DATA BASE TOTAL:	\$9	76.96

DCRLOG::SHOWS DATA STORED IN TABLE "COSTS".

# -----

#### DOCUMENT CONTROL REGISTER

Organization Code: 51510

02/16/00 5151000063a 1261 0000 main 257d y MC - Caldwell \$72.66 N 02/16/00 5151000063a 1261 0000 main 257d y MC - Caldwell \$70.50 N 02/16/00 5151000063a 1261 0000 main 257d y MC - Caldwell \$574.62 N 02/16/00 5151000063a 1261 0000 main 257d y MC - Caldwell \$574.62 N 02/16/00 5151000063a 1261 0000 main 257d y MC - Caldwell \$574.62 N 02/16/00 5151000063a 1261 0000 main 257d y MC - Caldwell \$434.88 N 02/16/00 5151000063a 1261 0000 main 257d y MC - Caldwell \$434.88 N 02/16/00 5151000063a 1261 0000 main 257d y MC Swoope \$153.98 N 02/16/00 5151000064a 1261 0000 main 257d y MC Swoope \$153.98 N 02/21/00 5151000065a 1261 0000 main 257d y MC Caldwell \$1,442.57 N 02/21/00 5151000065a 1261 0000 main 257d y MC Swoope \$427.67 N 04/17/00 5151000105a 1261 0000 main 257d y MC Swoope \$427.67 N 04/17/00 5151000105a 1261 0000 main 257d y MC Swoope \$96.23 N 04/17/00 5151000105a 1261 0000 main 257d y MC Swoope \$96.23 N 05/26/00 5151000105a 1261 0000 main 257d y MC Swoope \$96.23 N 05/26/00 5151000108a 1261 0000 main 257d y MC Stasko \$15.99 N 05/26/00 5151000108a 1261 0000 main 257d y MC Stasko \$15.99 N 07/21/00 5151000233a 1261 0000 main 257d y MC Stasko \$15.99 N 09/21/00 5151000247a 1261 0000 main 257d y MC Swoope \$456.00 N 09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$15.37 N 09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$15.37 N 09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$15.37 N 09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$15.37 N 09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$15.37 N 09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$15.37 N 09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$15.37 N 09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$15.37 N 09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$15.37 N	DATE 02/15/00 Comment:	SUB. PROJ. FIX. SPEC.  DCN NUMB.NUMB. CODE CODE R VENDOR NAME  5151000060a 1261 0000 main 257d y #002 Imprest  Taylor do it center. keys for jeep	AMOUNT \$8.74	Ant. Exp? N
Comment: cycle world; repairs of 98 suzuki atv  02/16/00 5151000063a 1261 0000 main 257d y MC - Caldwell \$574.62 N  02/16/00 5151000063a 1261 0000 main 257d y MC - Caldwell \$434.88 N  Comment: lee tractor of suffolk; repairs to john deer 6x4 gator  02/16/00 5151000064a 1261 0000 main 257d y MC Swoope \$153.98 N  Comment: goodyearII; two tires replaced  02/21/00 5151000065a 1261 0000 main 257d y MC Caldwell \$1,442.57 N  Comment: hall auto mall; repairs to 1995 jeep cherokee  04/17/00 5151000105a 1261 0000 main 257d y MC Swoope \$427.67 N  Comment: new pig corp.; spill skid used for cleaning trams  04/17/00 5151000105a 1261 0000 main 257d y MC Swoope \$96.23 N  Comment: pleasant ridge auto; vehicle repairs \$96.23 N  05/26/00 5151000108a 1261 0000 main 257d y MC Stasko \$15.99 N  Comment: Kmart; wheelcovers for corscica  09/05/00 5151000233a 1261 0000 main 257d y MC Caldwell \$456.00 N  Comment: #4 honda of va bch; repair to turtle patrol atv clutch  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$81.08 N  Comment: stevenson ford; muffler hardware for ford backhoe  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$15.37 N  Comment: pleaseant ridge auto; 11.55,27.95,58.37,10.91, 18.06  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$15.37 N  Comment: taylors; drain prob at colechester & padlock @ abceec	02/16/00 Comment:	5151000063a 1261 0000 main 257d y MC - Caldwell honda of Va Bch; repair to 94 honda atv	\$72.66	N
Comment: Colonial Chevrolet; repairs to 91 chev corsica  02/16/00 5151000063a 1261 0000 main 257d y MC - Caldwell S434.88 N  Comment: lee tractor of suffolk; repairs to john deer 6x4 gator  02/16/00 5151000064a 1261 0000 main 257d y MC Swoope \$153.98 N  Comment: goodyearII; two tires replaced  02/21/00 5151000065a 1261 0000 main 257d y MC Caldwell \$1,442.57 N  Comment: hall auto mall; repairs to 1995 jeep cherokee  04/17/00 5151000105a 1261 0000 main 257d y MC Swoope \$427.67 N  Comment: new pig corp.; spill skid used for cleaning trams  04/17/00 5151000105a 1261 0000 main 257d y MC Swoope \$96.23 N  Comment: pleasant ridge auto; vehicle repairs  05/26/00 5151000108a 1261 0000 main 257d y MC Stasko \$15.99 N  Comment: kmart; wheelcovers for corscica  09/05/00 5151000233a 1261 0000 main 257d y MC Caldwell \$456.00 N  Comment: #4 honda of va bch; repair to turtle patrol atv clutch  09/21/00 5151000247a 1261 0000 main 257d n MC Swoope \$81.08 N  Comment: stevenson ford; muffler hardware for ford backhoe  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$126.84 N  Comment: pleaseant ridge auto; 11.55,27.95,58.37,10.91, 18.06  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$15.37 N  Comment: taylors; drain prob at colechester & padlock @ abceec	02/16/00 Comment:	5151000063a 1261 0000 main 257d y MC - Caldwell cycle world; repairs of 98 suzuki atv	\$70.50	N
Comment: lee tractor of suffolk; repairs to john deer 6x4 gator  02/16/00 5151000064a 1261 0000 main 257d y MC Swoope \$153.98 N  Comment: goodyearII; two tires replaced  02/21/00 5151000065a 1261 0000 main 257d y MC Caldwell \$1,442.57 N  Comment: hall auto mall; repairs to 1995 jeep cherokee  04/17/00 5151000105a 1261 0000 main 257d y MC Swoope \$427.67 N  Comment: new pig corp.; spill skid used for cleaning trams  04/17/00 5151000105a 1261 0000 main 257d y MC Swoope \$96.23 N  Comment: pleasant ridge auto; vehicle repairs  05/26/00 5151000108a 1261 0000 main 257d y MC Stasko \$15.99 N  Comment: kmart; wheelcovers for corscica \$15.99 N  Comment: #4 honda of va bch; repair to turtle patrol atv clutch  09/21/00 5151000247a 1261 0000 main 257d y MC Caldwell \$456.00 N  Comment: stevenson ford; muffler hardware for ford backhoe  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$81.08 N  Comment: pleaseant ridge auto; 11.55,27.95,58.37,10.91, 18.06  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$126.84 N  Comment: taylors; drain prob at colechester & padlock @ abceec  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope \$15.37 N  Comment: kellam & Eaton; nylon rope 3/8" 202 ft .47	02/16/00 Comment:	5151000063a 1261 0000 main 257d y MC - Caldwell Colonial Chevrolet; repairs to 91 chev corsica	\$574.62	N
Comment: goodyearII; two tires replaced  02/21/00 5151000065a 1261 0000 main 257d y MC Caldwell \$1,442.57 N  Comment: hall auto mall; repairs to 1995 jeep cherokee  04/17/00 5151000105a 1261 0000 main 257d y MC Swoope Comment: new pig corp.; spill skid used for cleaning trams  04/17/00 5151000105a 1261 0000 main 257d y MC Swoope Comment: pleasant ridge auto; vehicle repairs  05/26/00 5151000108a 1261 0000 main 257d y MC Stasko Comment: kmart; wheelcovers for corscica  09/05/00 5151000233a 1261 0000 main 257d y MC Caldwell Comment: #4 honda of va bch; repair to turtle patrol atv clutch  09/21/00 5151000247a 1261 0000 main 257d n MC Swoope Comment: stevenson ford; muffler hardware for ford backhoe  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: pleaseant ridge auto; 11.55,27.95,58.37,10.91, 18.06  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: taylors; drain prob at colechester & padlock @ abceec  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Span N  Syd.94 N  Comment: kellam & Eaton; nylon rope 3/8" 202 ft .47	02/16/00 Comment:	5151000063a 1261 0000 main 257d y MC - Caldwell lee tractor of suffolk; repairs to john deer 6x4 gator	\$434.88	N
Comment: hall auto mall; repairs to 1995 jeep cherokee  04/17/00 5151000105a 1261 0000 main 257d y MC Swoope Comment: new pig corp.; spill skid used for cleaning trams  04/17/00 5151000105a 1261 0000 main 257d y MC Swoope Comment: pleasant ridge auto; vehicle repairs  05/26/00 5151000108a 1261 0000 main 257d y MC Stasko Comment: kmart; wheelcovers for corscica  09/05/00 5151000233a 1261 0000 main 257d y MC Caldwell Comment: #4 honda of va bch; repair to turtle patrol atv clutch  09/21/00 5151000247a 1261 0000 main 257d n MC Swoope Comment: stevenson ford; muffler hardware for ford backhoe  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: pleaseant ridge auto; 11.55,27.95,58.37,10.91, 18.06  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: taylors; drain prob at colechester & padlock @ abceec  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: taylors; drain prob at colechester & padlock @ abceec  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: kellam & Eaton; nylon rope 3/8" 202 ft .47			\$153.98	N
Comment: new pig corp.; spill skid used for cleaning trams  04/17/00 5151000105a 1261 0000 main 257d y MC Swoope Comment: pleasant ridge auto; vehicle repairs  05/26/00 5151000108a 1261 0000 main 257d y MC Stasko Comment: kmart; wheelcovers for corscica  09/05/00 5151000233a 1261 0000 main 257d y MC Caldwell Comment: #4 honda of va bch; repair to turtle patrol atv clutch  09/21/00 5151000247a 1261 0000 main 257d n MC Swoope Comment: stevenson ford; muffler hardware for ford backhoe  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: pleaseant ridge auto; 11.55,27.95,58.37,10.91, 18.06  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: taylors; drain prob at colechester & padlock @ abceec  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: kellam & Eaton; nylon rope 3/8" 202 ft .47	02/21/00 Comment:	5151000065a 1261 0000 main 257d y MC Caldwell hall auto mall; repairs to 1995 jeep cherokee	\$1,442.57	N
Comment: pleasant ridge auto; vehicle repairs  05/26/00 5151000108a 1261 0000 main 257d y MC Stasko Comment: kmart; wheelcovers for corscica  09/05/00 5151000233a 1261 0000 main 257d y MC Caldwell Comment: #4 honda of va bch; repair to turtle patrol atv clutch  09/21/00 5151000247a 1261 0000 main 257d n MC Swoope Comment: stevenson ford; muffler hardware for ford backhoe  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: pleaseant ridge auto; 11.55,27.95,58.37,10.91, 18.06  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: taylors; drain prob at colechester & padlock @ abceec  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: kellam & Eaton; nylon rope 3/8" 202 ft .47	04/17/00 Comment:	5151000105a 1261 0000 main 257d y MC Swoope new pig corp.; spill skid used for cleaning trams	\$427.67	N
Comment: kmart; wheelcovers for corscica  09/05/00 5151000233a 1261 0000 main 257d y MC Caldwell Comment: #4 honda of va bch; repair to turtle patrol atv clutch  09/21/00 5151000247a 1261 0000 main 257d n MC Swoope Comment: stevenson ford; muffler hardware for ford backhoe  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: pleaseant ridge auto; 11.55,27.95,58.37,10.91, 18.06  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: taylors; drain prob at colechester & padlock @ abceec  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: kellam & Eaton; nylon rope 3/8" 202 ft .47	04/17/00 Comment:	5151000105a 1261 0000 main 257d y MC Swoope pleasant ridge auto; vehicle repairs	\$96.23	N
Comment: #4 honda of va bch; repair to turtle patrol atv clutch  09/21/00 5151000247a 1261 0000 main 257d n MC Swoope Comment: stevenson ford; muffler hardware for ford backhoe  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: pleaseant ridge auto; 11.55,27.95,58.37,10.91, 18.06  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: taylors; drain prob at colechester & padlock @ abceec  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: kellam & Eaton; nylon rope 3/8" 202 ft .47	05/26/00 Comment:	5151000108a 1261 0000 main 257d y MC Stasko kmart; wheelcovers for corscica	\$15.99	N
Comment: stevenson ford; muffler hardware for ford backhoe  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: pleaseant ridge auto; 11.55,27.95,58.37,10.91, 18.06  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: taylors; drain prob at colechester & padlock @ abceec  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: kellam & Eaton; nylon rope 3/8" 202 ft .47	09/05/00 Comment:	5151000233a 1261 0000 main 257d y MC Caldwell #4 honda of va bch; repair to turtle patrol atv clutc	\$456.00 h	N
Comment: pleaseant ridge auto; 11.55,27.95,58.37,10.91, 18.06  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: taylors; drain prob at colechester & padlock @ abceec  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope Comment: kellam & Eaton; nylon rope 3/8" 202 ft .47	09/21/00 Comment:	5151000247a 1261 0000 main 257d n MC Swoope stevenson ford; muffler hardware for ford backhoe	\$81.08	N
Comment: taylors; drain prob at colechester & padlock @ abceec  09/21/00 pendingmcsw 1261 0000 main 257d N MC Swoope  Comment: kellam & Eaton; nylon rope 3/8" 202 ft .47	09/21/00 Comment:	pendingmcsw 1261 0000 main 257d N MC Swoope pleaseant ridge auto; 11.55,27.95,58.37,10.91, 18.06	\$126.84	N
Comment: kellam & Eaton; nylon rope 3/8" 202 ft .47	09/21/00 Comment:	pendingmcsw 1261 0000 main 257d N MC Swoope taylors; drain prob at colechester & padlock @ abceec	\$15.37	N
20/21/20 5151200055	09/21/00 Comment:	pendingmcsw 1261 0000 main 257d N MC Swoope kellam & Eaton; nylon rope 3/8" 202 ft .47	\$94.94	N
09/21/00 5151000256a 1261 0000 main 257d N MC Caldwell \$1,705.96 N Comment: the muffler center; 1663.84, 359.64 rpl ball jnts ront end 1988 ch	09/21/00 Comment:	5151000256a 1261 0000 main 257d N MC Caldwell the muffler center; 1663.84, 359.64 rpl ball jnts ront	\$1,705.96 end 1988 ch	N n
09/21/00 5151000256a 1261 0000 main 257d N MC Caldwell \$480.39 N Comment: cycle world; repl tires brakes, tunup on yamaha 4x4	09/21/00 Comment:	5151000256a 1261 0000 main 257d N MC Caldwell cycle world; repl tires brakes, tunup on yamaha 4x4	\$480.39	N

DCRLOG::SHOWS DATA STORED IN TABLE "COSTS".

-----

## DOCUMENT CONTROL REGISTER

Organization Code: 51510

		AMOUNT 1,376.00	Ant Exp
04/17/00	5151000107a 1262 0000 annu 257d y MC Caldwell goodyear; repair and repl of tires on ac fron end loader	\$533.00	N
	5151000126a 1262 0000 annu 257d y MC Caldwell the muffler center inc; re;r exhaust system on cheyenne	\$166.30 truck	N
06/16/00 Comment:	5151000157a 1262 r5an annu 257d y MC Swoope colley marine; repairs to whaler	\$735.11	N
	5151000157a 1262 r5an annu 257d y MC Swoope s&s tug; repairs to tram	\$283.26	N
	5151000157a 1926 0390 cor\$ 257d y MC Swoope hobbs implement co; work on gator	\$873.84	N
06/16/00 Comment:	5151000156a 1262 0000 annu 257d y MC Caldwell goodyear; tires and tubes for tram	\$128.28	N
06/16/00 Comment:	5151000156a 1262 r5an annu 257d y MC Caldwell witchduck used auto; replacement gas tank for 93 jeep	\$140.00	N
06/16/00 Comment:	5151000156a 1262 0000 annu 257d y MC Caldwell colley marine; repairs to 9hp outboard on whaler	\$292.51	N
07/27/00 Comment:	5151000197a 1262 r5an annu 257d y MC Swoope pleasant rdige auto; vehicl maint	\$265.71	N
	5151000198a 1262 r5an annu 257d y MC Caldwell honda of va bch; tires for turtle patrol	\$132.16	N
	5151000198a 1262 r5an annu 257d y MC Caldwell	\$796.89	NT
Comment:	the muffler center; brake system repar to the 1987 dodge	d250 pu	N
07/27/00 Comment:	5151000198a 1262 r5an annu 257d y MC Caldwell the muffler center; replace shocks springs and struts on	\$879.37 1991 che	N V
07/27/00 Comment:	5151000198a 1262 r5an annu 257d y MC Caldwell hall auto mall; repair motor mounts on 1995 jeep	\$340.15	N
07/27/00 Comment:	5151000198a 1262 r5an annu 257d y MC Caldwell the muffler center; tire and mounting for m3 tug	\$122.88	N
07/31/00 Comment:	5151000231a 1262 0000 annu 257d y MC Swoope cycle world; suzuki atv reapirs piston, cylinder board, g	\$482.13 gasket oi	N
07/31/00	pendingmcsw 1262 r5an annu 257d N MC Swoope #10 pleasant ridge auto; vehicle repairs	\$781.33	

## DOCUMENT CONTROL REGISTER

07/31/00 pendingmcsw 1262 0000 annu 257d N MC Swoope \$300.75 N Comment: pleasant ridge auto; various bpa non-paid invoices145.69, 15.25, 8	
08/23/00 5151000218a 1262 0000 annu 257d y MC Stasko \$50.00 N Comment: goodyear; tires	
07/31/00 5151000231a 1262 r5an annu 257d y MC Swoope \$318.81 N Comment: #46 pleasant ridge auto; vehicle repairs	
08/05/00 5151000233a 1262 r5an annu 257d y MC Caldwell \$27.00 N Comment: #1 goodyear; repair flat tire ford 531 tractor	
08/05/00 5151000233a 1262 r5an annu 257d y MC Caldwell \$78.72 N Comment: #2 stevenson ford tractor; brake repairs for 531 tractor	
08/05/00 5151000233a 1262 r5an annu 257d y MC Caldwell \$1,056.84 N Comment: #6 colonial cheverolet; repairs ac wipers on chevy cheyenne truck	
08/05/00 5151000233a 1262 r5an annu 257d y MC Caldwell \$290.77 N Comment: #7 stevenson ford tractor; repairs bushhog on for 531 tractor	
08/05/00 5151000232a 1262 0000 annu 257d y MC Stasko \$123.77 N Comment: beach ford; repair to aerostar	
09/07/00 5151000247a 1262 r5an 'annu 257d y MC Swoope \$102.00 N Comment: cycle world; suzuki repairs had trb maint speed in 5 gear watr deb	
09/07/00 pendingmcsw 1262 r5an annu 257d N MC Swoope \$700.00 N Comment: beach marine services; canoe needed to post and patrol shallow wat	
09/07/00 pendingmcsw 1262 r5an annu 257d N MC Swoope \$400.00 N Comment: beach marine services; rough neck needed to post and patrol shallo	
09/07/00 5151000246a 1262 0000 annu 257d y MC Caldwell \$85.48 N Comment: stevenson ford tractor, parts for bush hog	
09/07/00 5151000246a 1262 0000 annu 257d y MC Caldwell \$297.95 N Comment: macco auto painting; chevy pu paint to be in compliance w service	
09/11/00 5151000246a 1262 r5an annu 257d y MC Caldwell \$1,305.98 N Comment: the muffler center; repair to front brakes and radiator for1988 ch	
09/18/00 5151000247a 1262 r5an annu 257d y MC Swoope \$157.32 N Comment: pleasant ridge auto; boat repairs go devel air filter acloader	
09/18/00 pendingmcgs 1262 r5an annu 257d N MC Swoope \$3,263.00 N Comment: outboard marine corpl evinrude midrange 4stroke outboard model e40	
Organization Total: \$16,887.31	
DATA BASE TOTAL: \$16,887.31	